

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

RODE MICROPHONES, LLC AND)
FREEDMAN ELECTRONICS PTY LTD,)

Petitioners,)

vs.)

ZAXCOM, INC.,)

Patent Owner.)

IPR2025-00230

Patent 7,711,443

REMOTE DEPOSITION OF JAMES DeFILIPPIS

November 14, 2025

8:02 a.m. - 11:12 a.m.

Reported by: Carrie LaMontagne, CSR No. 13393

1 The remote deposition of JAMES DeFILIPPIS,
2 located in Los Angeles, California, on behalf of the
3 Petitioners, before Carrie LaMontagne, a Certified
4 Shorthand Reporter for the State of California,
5 commencing on Friday, November 14, 2025, at 8:02 a.m.,
6 via Zoom Video Communications.

7
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23
24 Also appearing: Glenn Sanders
25

I N D E X

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PETITIONERS' INDEX OF EXHIBITS

EXHIBIT NO. PAGE

Exhibit 1 Declaration of Mr. James M. 8
DeFilippis

Exhibit 2 United States Patent No. 21
5,479,351 (Woo, et al.)

Exhibit 3 United States Patent No. US 27
7,711,443 (Saunders, et al.)

Exhibit 4 United States Patent No. 46
6,825,875 (Strub, et al.)

Exhibit 5 United States Patent 10, 72
276,207 (Sanders, et al.)

Exhibit 6 United States Patent 7,483,485 81
(Winningstad, et al.)

1 THE REPORTER: Good morning. I'm
2 Carrie LaMontagne. My CSR number is 13393.

3
4 JAMES DeFILIPPIS,
5 having first been sworn to tell the truth, the whole
6 truth, and nothing but the truth, testified as follows:

7
8 EXAMINATION

9 BY MR. PLIES:

10 Q. Good morning. Mr. DeFilippis, my name is
11 Jeff Plies. I represent the Petitioners Rode and
12 Freedman. I'm sitting here in Austin, Texas, I guess
13 about two hours ahead of you.

14 So first, can you just restate your name for the
15 record.

16 A. James DeFilippis.

17 Q. And in what city and state do you reside?

18 A. Los Angeles, California.

19 Q. And are you represented today by counsel?

20 A. No.

21 Q. And as I understand it, you've been retained
22 by Zaxcom for these current IPR matters pending at the
23 PTAB?

24 A. Yes.

25 Q. Prior to these current IPR matters, have you

1 previously been retained by Zaxcom in any capacity?

2 A. Yes.

3 Q. And what has your relationship been in regards
4 to Zaxcom prior to these current IPRs?

5 MS. CHIPPERSON: Objection. Form.

6 BY MR. PLIES:

7 Q. You can answer, sir.

8 A. I'm sorry. Can you repeat the question.

9 Q. Sure.

10 Prior to these current IPRs, what has been your
11 relationship at Zaxcom?

12 A. I was an expert witness in Electrosonic's IPR,
13 and I've known Zaxcom and Glenn since the early 2000s
14 when I was a vice president at Fox television in a
15 business relationship.

16 Q. Okay. So you were Zaxcom's IPR expert in the
17 earlier Electrosonics; is that correct?

18 A. Yes.

19 Q. Have you been Zaxcom's expert or consultant in
20 any court litigation?

21 A. No.

22 Q. And have you been an expert or consultant for
23 Zaxcom in any business endeavors?

24 A. No.

25 Q. So you mentioned that you know Glenn Sanders;

1 is that correct?

2 A. Yes.

3 Q. Okay. And I think you said you knew them
4 since the early 2000s?

5 A. Yes.

6 Q. Okay. How did you come to know Mr. Sanders?

7 A. My role at Fox was to investigate and look at
8 new technologies. Glenn contacted me that he was
9 working on wireless -- digital wireless microphone
10 technology, and that was an area of interest to Fox.
11 And I helped facilitate a test -- I think it might have
12 been Giants Stadium, but I'm not 100 percent sure, where
13 he was able to test some of his early prototypes.

14 Q. Do you recall what year that was?

15 A. No, I don't.

16 Q. After that testing of his prototypes, was
17 there any continuing relationship with Mr. Sanders for
18 Zaxcom?

19 A. We kept in touch, correspondence throughout
20 the years on various matters but nothing of "substant"
21 business.

22 Q. Do you ever socialize with Mr. Sanders?

23 A. No.

24 Q. Have you been deposed before?

25 A. Yes.

1 Q. Okay. I assume you were deposed in the
2 Electrosonics IPRs?

3 A. Yes.

4 Q. Any other depositions besides those?

5 A. No.

6 Q. Have you been hired by other parties as an
7 expert in IPR proceedings?

8 A. No.

9 Q. Have you been hired by any other parties to be
10 a consultant or expert in regards to litigation?

11 A. No.

12 Q. And you mentioned being at Fox.
13 How long were you at Fox?

14 A. I was at Fox from 1998 until 2013.

15 Q. Okay. And can you -- I guess, at a high level
16 sort of explain what your responsibilities were at Fox
17 during your tenure.

18 A. I was part of a group of senior technologists
19 to evaluate new technologies and their impact on the
20 various aspects of Fox, from the television stations,
21 television network, sports, news, movies, television
22 production in Hollywood, whatever interest that Fox had.

23 Q. So what sorts of technologies did you
24 evaluate?

25 A. Well, my area of expertise was in television.

1 So started -- we had a -- we looked at high-definition
2 TV, video compression, audio compression, disc drive
3 recording, nonlinear editing, wireless broadcast -- you
4 know, streaming, 3D TV. What am I forgetting here?
5 Yeah. Those are the highlights.

6 Q. And so you mentioned that you had done some
7 evaluation of some Zaxcom digital wireless microphone
8 prototypes?

9 A. In the extent that I facilitated a test, a
10 real-world test at Giants Stadium.

11 Q. Do you know if Fox purchased the Zaxcom
12 wireless microphones?

13 A. Not to my knowledge. It may have been -- it
14 may be in use, and I wouldn't have known that at the
15 time. But to my knowledge, no, they didn't purchase
16 any.

17 Q. Now, you prepared a declaration for these IPR
18 proceedings, correct?

19 A. Yes.

20 Q. Okay. All right. So I'm going to introduce
21 that as Exhibit 1.

22 (Petitioners' Exhibit No. 1 marked for identification
23 purposes and made part of the record.)

24 BY MR. PLIES:

25 Q. So the first thing I'm going to do here is I'm

1 going to grab the document, and I'm going to drop it
2 into the chat just to make sure everybody has a copy.

3 All right. So I just sent it around.

4 Do you happen to have a hard copy of your
5 declaration with you?

6 A. I have an electronic copy.

7 Q. Okay. And I just sent another electronic copy
8 through the chat. So people should be getting that.
9 And next let me screen share it.

10 A. Okay.

11 Q. Okay. Can you see your declaration on the
12 screen?

13 A. Yes.

14 Q. And does the declaration include your opinions
15 with respect to the validity of 443 and 207 patents?

16 A. Yes.

17 Q. And you submitted the same declaration for
18 both the 230 case and the 232 case, correct?

19 MS. CHIPPERSON: Objection.

20 THE WITNESS: Yes.

21 BY MR. PLIES:

22 Q. Okay. And the exhibit number for the 230 case
23 is Exhibit 2140; is that right?

24 A. I don't know.

25 Q. All right. If you look --

1 A. Okay. Yes, I see it there.

2 Q. It's corresponding -- thank you.

3 And it's corresponding Exhibit 2058 for the 232 IPR
4 case; is that right?

5 A. Yes.

6 Q. So at paragraph 4 of your declaration, which,
7 again, I've introduced as Exhibit 1., I notice that
8 you -- you have a sentence in here that says that you
9 worked on next-generation audio codecs.

10 Do you see that in paragraph 4?

11 A. Yes.

12 Q. Can you explain what you mean by that.
13 What codecs did you work on?

14 A. I was consultant to a company called
15 Fraunhofer [phonetic], and they had developed an
16 immersive audio codec system called MPEG-H, and I was
17 involved in not the development of the codec but the
18 standardization and adoption of that codec.

19 Q. Did you participate in the standards
20 committees of that codec?

21 A. Yes.

22 Q. So you attended committee meetings?

23 A. Yes.

24 Q. Which organization did the standardization for
25 that one?

1 A. I was involved in the ATSC 3.0 standards
2 process. And then follow on, I was involved in the STE,
3 the Society of Television Engineers, standardization
4 process.

5 Q. Now, is ATSC 3.0, that's a television
6 broadcast standard, isn't it?

7 A. I'm sorry. Could you repeat the question. It
8 broke up at some point.

9 Q. Yeah.

10 ATSC 3.0, that's a high-definition television
11 broadcast standard?

12 A. It is a television broadcast standard, yes.

13 Q. Have you developed any audio hardware?

14 A. No.

15 Q. Have you had the occasion to use wireless
16 microphones in a professional studio setting?

17 A. Yes.

18 Q. And can you elaborate? Like, what was the
19 context of your usage?

20 A. Well, a variety of usage in, you know, sports
21 broadcasting, news broadcasting. Most recently I worked
22 on a student project where we used wireless microphones
23 for a news-magazine-type show.

24 Q. Would you consider that to have been a regular
25 part of your work to utilize digital wireless

1 microphones?

2 MS. CHIPPERSON: Objection.

3 THE WITNESS: No, I wouldn't consider it
4 regular. I'm not -- I'm not -- my background -- my
5 experience has not been heavy in operations. Again,
6 more technology based and design.

7 BY MR. PLIES:

8 Q. Have you used or inspected any Zaxcom
9 products?

10 A. No.

11 Q. Turning back to Exhibit 1, your declaration, I
12 want to ask you a few questions.

13 So do you see in Roman numeral III, you have a
14 section entitled "Understanding of Legal Principles"?

15 A. Yes, I see that.

16 Q. Okay. And there's a paragraph 12, the first
17 paragraph in that section. And I wanted to draw your
18 attention to the last sentence of paragraph 12. It
19 says:

20 "It is further my understanding that for
21 a reference to be prior art, it must be
22 enabled and teach one of skill in the
23 art how to make and use the invention
24 without undue experimentation," unquote.

25 Do you see that?

1 A. Yes, I do.

2 Q. So I just want to explore a little bit your
3 understanding of this legal requirement or enablement.

4 Is it your understanding that each separate item of
5 prior art that's used as part of an obviousness
6 combination must teach a person of ordinary skill how to
7 make and use the claimed invention without undue
8 experimentation?

9 MS. CHIPPERSON: Objection to form.

10 THE WITNESS: I'm sorry. Can you repeat the
11 question.

12 BY MR. PLIES:

13 Q. Yeah.

14 So is it your understanding that each item of prior
15 art that's relied upon must teach a person of ordinary
16 skill how to make and use a claimed invention without
17 undue experimentation?

18 MS. CHIPPERSON: Objection to form.

19 THE WITNESS: If I understand the question
20 you're asking, it would -- if the prior art is relevant
21 to the current discussion, then yes. If not, then --
22 but if it was integral to the overall functionality,
23 then yes.

24 BY MR. PLIES:

25 Q. All right. Let me -- let me ask another way.

1 Do you understand that the petitioners have made
2 the argument that some of the challenged claims are
3 invalid in view of, for example, the Strub reference in
4 combination with the Woo reference?

5 MS. CHIPPERSON: Objection to form.

6 THE WITNESS: I am aware that we have -- I was
7 asked to review Strub and to apply this criteria of
8 enablement and to look at if there was sufficient
9 information that a POSA would be able to enable that
10 invention without undue experimentation or reliance on
11 additional resources, expertise.

12 BY MR. PLIES:

13 Q. For an obviousness argument that relies on
14 both Strub and Woo, is it your understanding that each
15 of those prior art references must enable one of skill
16 to make and use the invention without undue
17 experimentation?

18 MS. CHIPPERSON: Objection to form.

19 THE WITNESS: Again, I'm sorry. Could you
20 repeat that question.

21 BY MR. PLIES:

22 Q. Yeah.

23 I guess what I'm trying to figure out is when an
24 obviousness argument is being made that is relying on
25 multiple prior art references, is it your position that

1 the references collectively must teach one of skill how
2 to make and use the invention without undue
3 experimentation? Or is it your position that each
4 reference taken by itself must enable one of ordinary
5 skill to make and use the invention without undue
6 experimentation?

7 MS. CHIPPERSON: Objection to the form.
8 Vague.

9 THE WITNESS: To clarify, are you suggesting
10 that we're asking this in the context of combining Strub
11 and Woo or just Strub?

12 BY MR. PLIES:

13 Q. I'm saying in the context of combining
14 references as part of an obviousness analysis.

15 When you're looking at enablement in that
16 situation, are you looking to see whether each reference
17 in the combination enables one of skill to make and use
18 the invention without undue experimentation, or are you
19 collectively looking at the reference to see if they
20 teach that?

21 MS. CHIPPERSON: Objection to form.

22 THE WITNESS: I'm sorry. I'm confused because
23 when you say enablement of invention, are you referring
24 to the specific invention of the particular patent, for
25 instance, Strub? Or are you talking about the invention

1 as to Zaxcom?

2 BY MR. PLIES:

3 Q. Well, that's a good question.

4 Which of those did you perform your analysis? So
5 yeah -- I like what you -- what you just said there
6 because it helps elaborate your thought process when you
7 did your enablement analysis.

8 When you were doing your enablement analysis, were
9 you looking at whether the prior art enabled its
10 invention or were you looking whether the prior art
11 enabled the invention in the challenged patents?

12 MS. CHIPPERSON: Objection to form.

13 THE WITNESS: I wasn't asked to review the
14 Strub patent from the standpoint of a POSA, would they
15 be able to have built that or reproduced that invention
16 without undue experimentation.

17 BY MR. PLIES:

18 Q. And when you say "that invention," you're
19 referring to the invention that's Strub's disclosing; is
20 that right?

21 A. Correct.

22 Q. And that last sentence in paragraph 12, you
23 say, "it must teach one of skill in the art how to make
24 and use the invention." So you say "make and use."

25 So did you apply that conjunction in performing

1 your enablement analysis that it had to be able to make
2 and use the invention?

3 MS. CHIPPERSON: Objection to form. Vague.
4 Compound.

5 THE WITNESS: Yeah. I mean, the analysis was
6 could one -- could a POSA, not one, have created or
7 built or reproduced that particular device that was
8 defined in the Strub patent and implement all the
9 features that are in the Strub patent without undue
10 experimentation.

11 In terms of use, well, that's -- you know, once
12 it's created, the use is fairly -- well, there are
13 issues about how that device could be used to fulfill
14 its stated goals. But the primary look was to -- could
15 someone be able -- could a POSA of skill be able to
16 reproduce it without -- again, without undue
17 experimentation.

18 BY MR. PLIES:

19 Q. Okay. But this last sentence in paragraph 12,
20 that's the standard you applied when you performed your
21 enablement analysis, correct?

22 A. Yes.

23 Q. So staying on the enablement issue, I want to
24 skip ahead in your declaration to paragraph 290.

25 All right. So do you see that we have a

1 subsection 10, "Strub's disclosure does not enable a
2 POSA to make or use the invention of the challenged
3 claims"?

4 Do you see that?

5 A. No. Would you highlight it.

6 Q. At the bottom of page 104.

7 A. Page -- oh, the bottom of page 104. Okay.

8 Oh. Okay. All right. Okay.

9 Q. Then we have paragraph -- then we have
10 paragraph 290 below that.

11 Do you see paragraph 290?

12 A. Yeah.

13 Q. All right. So you see that the first sentence
14 says that Strub does not -- many were not --

15 "Strub teaches a fantastical, futuristic
16 device (for April 2000) with virtually
17 unlimited features, many of which were
18 not technologically able to be done on
19 Strub's filing date of April 21, 2000."

20 Do you see that?

21 A. Yes.

22 Q. Why did you select April 21, 2000, as being
23 the relevant date to determine enablement?

24 A. Well, it was the date with which that
25 information would have been available.

1 Q. And that's the date that you applied for your
2 analysis, correct?

3 A. That was the general time frame that I applied
4 my analysis to, yes.

5 Q. But you don't present any opinion, for
6 example, of how one of ordinary skill would have viewed
7 Strub, you know, several years later like in 2004?

8 A. Well, it's, you know, there's -- you know,
9 there was constant development. So the answer is we
10 tried as -- I tried as best as possible to apply and
11 determine what the state of technology was at that
12 point.

13 Now, there's technology that was announced, say, in
14 2000, that wasn't fully enabled until 2004, for
15 instance. But we tried -- I tried to keep it to that
16 time frame, 2000.

17 Q. All right. Moving a little bit further down
18 in your declaration in this enablement section. So you
19 have a paragraph 320.

20 Do you see that paragraph?

21 A. Yes.

22 Q. Okay. Do you see the last sentence reads,
23 "This level of unpredictability shows that Strub's
24 specification is not enabling under at least Wands
25 Factors 4, 5, 7."

1 Do you see that?

2 A. Uh-huh.

3 Q. What are the Wands Factors?

4 A. I'm not conversant in that.

5 Q. Do you have any idea what Factor 4 is?

6 A. I do not.

7 Q. Factor 5 or 7?

8 A. No.

9 Q. Did you prepare this portion of your
10 declaration?

11 A. I reviewed it, yes.

12 Q. So it was prepared by others, and then you
13 reviewed it; is that correct?

14 A. I prepared the declaration. It was reviewed
15 by counsel and Patent Owner, and then I reviewed it
16 again.

17 Q. Did you happen to ask the people you were
18 working with what the Wands Factors were?

19 A. No. They may have explained it at the time,
20 but I don't recall.

21 Q. Okay. All right. Well, let me shift gears
22 here in a little bit.

23 Are you familiar with the term "jam syncing" in the
24 context of audio?

25 A. Yes, I am.

1 Q. And can you just explain in your own words
2 what a jam syncing process entails?

3 A. The jam syncing that is used in context of
4 this -- of the patents -- the Zaxcom patents is to take
5 an external reference signal. It could be a single
6 frequency, a pulse but in this case was a timecode
7 signal. And it accomplishes two things: One, it locks
8 in the same time base so that your sample clocks are
9 aligned; and it also provides a time reference, a
10 specific time reference, and, again, coordinates the
11 time between two devices.

12 Q. So that external signal is, then, used to
13 control or synchronize a clock in a device?

14 A. It does two things: It would synchronize the
15 clock; and it would also -- it would also provide a
16 common time coordinate.

17 Q. All right. Let me introduce Exhibit 2, which
18 is the Woo reference. So let me first put this in the
19 chat.

20 (Petitioners' Exhibit No. 2 marked for identification
21 purposes and made part of the record.)

22 BY MR. PLIES:

23 Q. All right. So Exhibit 2 that I've introduced
24 is the Woo, patent number 5,479,351.

25 Do you recognize Exhibit 2, the Woo reference?

1 A. Yes.

2 Q. All right. So I wanted to direct your
3 attention to -- so column 3. And we have a paragraph
4 here from 38 to 45.

5 And do you see that that first sentence says, "A
6 common feature of time code generators is the slave or
7 jam-sync process"?

8 A. Yes, I see that.

9 Q. Okay. And do you see that it goes on to say
10 that "There are two basic modes of slaving or jam
11 syncing time code. Hard slave or hard jam and soft
12 slave or one-shot jam."

13 Do you see that?

14 A. Yes.

15 Q. So what's -- what's your understanding of what
16 the hard-slave method is?

17 A. Well, that would mean in continuous lock. It
18 says, I'm going to continuously monitor the
19 synchronization and ensure that the clocks are following
20 each other.

21 Q. And when you say the "clocks are following
22 each other," you mean the clock or the slave is
23 following the clock of the master?

24 A. Correct.

25 Q. And what -- then it also gives us alternate

1 methods, soft slave.

2 What's your understanding about what a soft-slave
3 jam sync is?

4 A. Well, that's where you would jam sync once,
5 and then you're relying on the slave unit to free run
6 after that. And you're assuming it's stable -- it's
7 stable enough for your application.

8 Q. For audio recording devices that use, for
9 example, the soft-slave method, do you know, like, in
10 the art, like, how often you would sync or lock up to
11 the time source?

12 MS. CHIPPERSON: Objection. Form. Compound.
13 Vague. Calls for speculation.

14 THE WITNESS: To answer your question, I'd
15 have to understand the application. But generally it's
16 used in applications, non-realtime applications where,
17 for instance, you might want to coordinate various
18 recordings, but you're not worried too much about the
19 prior synchronization.

20 BY MR. PLIES:

21 Q. And is that because, after you sync the clock
22 in the device to the master signal, it's, then, going to
23 drift away from the master time reference?

24 A. Yes. I believe Woo addresses that somewhere
25 in their specification that there is drift involved, and

1 they kind of quantify it with a particular type of
2 timecode generator.

3 Q. And when you say "drift," that's the growing
4 deviation in time between the master and the slave after
5 they were originally synced; is that right?

6 MS. CHIPPERSON: Objection to form.

7 THE WITNESS: I'm sorry. Repeat the question.

8 BY MR. PLIES:

9 Q. I'm trying to understand this concept of
10 drift. That's -- let me just ask kind of open ended.

11 What does it mean for one clock to drift away from
12 another?

13 A. Well, in all physical implementations of an
14 oscillator, for instance, or a counter, there are
15 variations due to temperature and particular variances
16 in the components. And with that you get a change or a
17 drift of, for instance, frequency or time. So the two
18 clocks will -- if you bring them back together, they may
19 not be a hundred percent in alignment.

20 Q. So on the soft method, you would do a jam sync
21 to synchronize two clocks, but thereafter, because of
22 temperature variations or oscillator changes, they'll
23 start drifting or departing from each other. So if you
24 bring them back together, the times don't quite match.

25 Did I understand that correctly?

1 MS. CHIPPERSON: Objection to form.

2 THE WITNESS: Yes.

3 BY MR. PLIES:

4 Q. All right. So in your -- let me turn back to
5 your declaration, your Exhibit 1. So I want to draw
6 your attention to paragraph 183 of Exhibit 1?

7 A. Okay.

8 Q. Do you see the second sentence says, "Woo
9 needs to use a highly accurate pulse because the output
10 of the GPS receiver is insufficient to achieve
11 synchronization."

12 Do you see that sentence?

13 A. Yes.

14 Q. And that highly accurate pulse that you were
15 referring to, is that what's being described in
16 paragraph (i) at the top of the page?

17 MS. CHIPPERSON: Objection to form.

18 THE WITNESS: Yes. Yes.

19 BY MR. PLIES:

20 Q. Do you recall how that highly accurate, you
21 know, one pulse per second is generated in Woo?

22 A. It's an output from -- typically from a GPS
23 receiver.

24 Q. Right. So if I direct your attention to Woo,
25 Exhibit 2, and column 8 starting at line 19, do you see

1 where it says:

2 "For example, in the GPS code
3 transmission, epochs repeat every one
4 millisecond, and these epochs are
5 accumulated to for the
6 one-pulse-per-second output accurate to
7 one microsecond."

8 Do you see that?

9 A. Yes.

10 Q. How do you understand what's being said there?

11 MS. CHIPPERSON: Objection to form.

12 THE WITNESS: I understand that that's the way
13 that this particular GPS receiver creates the one pulse
14 per second.

15 BY MR. PLIES:

16 Q. So it's -- would it be correct to say that the
17 GPS receiver is basically counting these one millisecond
18 epochs. And once it counts a thousand, that's a second
19 and then it generates the pulse?

20 MS. CHIPPERSON: Objection to form.

21 THE WITNESS: There are many ways that a GPS
22 receiver can do that. This is an example. So I
23 understand this is the example that is being presented
24 here.

25 ///

1 BY MR. PLIES:

2 Q. All right. Let me introduce Exhibit 3, which
3 is the 443 patent.

4 (Petitioners' Exhibit No. 3 marked for identification
5 purposes and made part of the record.)

6 BY MR. PLIES:

7 Q. So I'm putting that in the chat and
8 circulating it.

9 So, for the record, Exhibit 3 is U.S. patent
10 7,711,443.

11 All right. So I wanted to direct your attention to
12 Claim 1 of the 443 patent.

13 A. Okay.

14 Q. All right. So do you see that the first claim
15 element in the body recites "at least one master
16 timecode generator for generating a plurality of master
17 timecodes"?

18 A. Yes.

19 Q. So in order to satisfy the claim, how many
20 timecodes must the master generator be capable of using?

21 A. I'm sorry. You broke up in the middle of
22 that. Could you repeat it.

23 Q. Sure.

24 So -- again -- so the element saying at "least one
25 master timecode generator for generating a plurality of

1 master timecodes."

2 Based on the plain language of that, how many
3 timecodes must the master timecode generator be able to
4 produce to satisfy that element?

5 MS. CHIPPERSON: Sorry. Objection. Calls for
6 a legal conclusion.

7 THE WITNESS: One may be sufficient, but there
8 may be needs for more than one.

9 BY MR. PLIES:

10 Q. It says for "generating a plurality of master
11 timecodes."

12 So wouldn't the answer be two? If you have two
13 timecodes, that would satisfy the element.

14 MS. CHIPPERSON: Objection. Asked and
15 answered. And, again, calls for a legal conclusion.

16 BY MR. PLIES:

17 Q. Do you agree with that or do you disagree with
18 that?

19 A. I speak from the technical side of the
20 meaning, and the meaning is that the timecode
21 generator -- the master timecode generator needs to
22 generate a master timecode and can also create a
23 plurality -- plurality -- a multiple -- sorry -- master
24 timecodes.

25 Q. Right. Plurality means two or more, right?

1 MS. CHIPPERSON: Objection. Calls for a legal
2 conclusion.

3 THE WITNESS: My understanding of the word
4 plurality is that it means more than one, yes.

5 BY MR. PLIES:

6 Q. Now, is there anything in this claim language,
7 either in this first element or anywhere else, that
8 requires timecodes to be received continually?

9 MS. CHIPPERSON: Objection. Calls for a legal
10 conclusion.

11 THE WITNESS: I would have to look through all
12 the claims. I think it's in a later claim that they
13 talk about -- I'm trying to remember where it is.
14 Sorry. I'm having trouble finding that section of the
15 claims.

16 BY MR. PLIES:

17 Q. Are you looking at the 443 patent?

18 A. Yes, I am.

19 Okay. I guess the only thing -- sorry. In one --
20 in Claim 1 it does say at least -- at least one audio
21 device receiver [indiscernible] for receiving said
22 master timecodes.

23 Q. And "said master timecodes" is referring to
24 element A which recites a plurality of master timecodes,
25 correct?

1 A. Correct.

2 MS. CHIPPERSON: Objection.

3 BY MR. PLIES:

4 Q. And plurality, as we discussed before, means
5 two or more, correct?

6 MS. CHIPPERSON: Objection. Mischaracterizes
7 the prior testimony. Form. Asks for a legal
8 conclusion.

9 THE WITNESS: I mean I can agree that
10 plurality means more than one.

11 BY MR. PLIES:

12 Q. All right. So it's your view that the claim
13 requires that master timecodes be continually provided
14 to the local audio device?

15 MS. CHIPPERSON: Objection. Sorry. I thought
16 you were done.

17 BY MR. PLIES:

18 Q. Is that the understanding you applied when you
19 did your invalidity analysis?

20 MS. CHIPPERSON: Objection. Form. Compound.
21 Calls for a legal conclusion. Mischaracterizes prior
22 testimony and compound.

23 THE WITNESS: Yeah -- can you just restate
24 that question, please.

25 ///

1 BY MR. PLIES:

2 Q. Yeah. I mean, I'm just trying to understand
3 your methodology and how you understood the claim when
4 you were developing your invalidity opinion.

5 So my question is when you were preparing your
6 invalidity opinion, did you do so with the understanding
7 that Claim 1 requires timecodes to be received
8 continually by the local audio device?

9 MS. CHIPPERSON: Objection.

10 THE WITNESS: So I'm not sure what you're
11 referring to. When you say "invalidity," invalidity of
12 the Zaxcom patent or invalidity of the -- for the
13 unenablement of the Strub patent or are we referring to
14 Woo? It's not clear to me.

15 BY MR. PLIES:

16 Q. When you were -- I can swap the word.
17 When you were preparing your validity opinions in
18 your declaration with respect to whether Claim 1 is
19 obvious in view of the prior art, did you assume that
20 Claim 1 required timecodes to be continuously received
21 by the local audio device?

22 MS. CHIPPERSON: Objection.

23 THE WITNESS: I believe the support for
24 Claim 1 and the continuous sync is embodied by -- I
25 think it's Figure 5, which shows a flowchart of how the

1 master timecodes synchronize with local timecodes. And
2 that diagram purports to explain the process that the
3 claim is based on.

4 BY MR. PLIES:

5 Q. So you're talking about Figure 5 of Exhibit 3
6 in the 443 patent?

7 A. Right.

8 Q. So you believe in view of Figure 5, the claim
9 requires continuous reception of timecodes?

10 A. Yes.

11 MS. CHIPPERSON: Objection.

12 BY MR. PLIES:

13 Q. I'm sorry, sir. I didn't hear your answer on
14 that.

15 A. Yes.

16 MS. CHIPPERSON: The same objection.

17 BY MR. PLIES:

18 Q. All right. So if a company built a product
19 that practiced all the elements of Claim 1 of the 443
20 patent except that the master timecodes were being
21 provided by GPS, would that product infringe Claim 1 of
22 the 443 patent?

23 MS. CHIPPERSON: Objection. Calls for
24 speculation. Vague.

25 THE WITNESS: I'm going to take it from the

1 standpoint of you're asking me could you substitute GPS
2 for the master timecode. And it is my opinion that no,
3 GPS alone cannot substitute for the master timecode.

4 BY MR. PLIES:

5 Q. So a company could design around Claim 1 by
6 using GPS as their master timecode carrier?

7 MS. CHIPPERSON: Objection. Form.

8 THE WITNESS: Again, my statement is that
9 using a GPS to enable this patent -- this device does
10 not substitute for the need for a master timecode.

11 BY MR. PLIES:

12 Q. So using GPS wouldn't be enough to satisfy the
13 claim. You would have to have something else as the
14 master timecode generator is my understanding of what
15 you're saying?

16 MS. CHIPPERSON: Objection. Asked and
17 answered.

18 THE WITNESS: The master -- the key -- sorry.
19 I need to take a breath here. Something went down the
20 wrong way.

21 Sorry. I'm still having trouble with this.

22 The master timecode is a timecode generated and
23 used to jam synchronize to the local timecode generator
24 and providing synchronous lock to that. So the use of a
25 GPS signal is not sufficient to do that.

1 BY MR. PLIES:

2 Q. So is it your view that Woo, even though it
3 discloses jam syncing, as we discussed earlier, that
4 that can't meet the master timecode element because Woo
5 is using GPS to do the jam syncing?

6 MS. CHIPPERSON: Objection. Form. Compound.
7 Vague.

8 THE WITNESS: If I may explain the differences
9 here. I believe that in Woo, when he's talking about --
10 when they're talking about jam syncing, they're talking
11 about timecode to a recorder. The reliance on GPS in
12 Woo is to provide a frequency reference and to provide a
13 time reference. The difference between Woo and the 443
14 patent and the others in the series is that you -- the
15 GPS cannot provide a starting point. It can't say
16 when -- I'm going to switch over to the -- to video
17 because it's a little easier to understand.

18 Video is geared to frames that occur in regular
19 intervals. In particular some video systems use --
20 split the frame into two fields. So there's a sense of
21 oddness and evenness. That sense is carried with
22 timecode, but you have to be consistent across
23 everything. Since GPS satellite has no knowledge of
24 frames or fields, independent systems that use GPS to
25 lock need to coordinate when they're going to step off.

1 And this is -- what we call it in the industry -- V1,
2 the first field or first frame. And therefore in Woo
3 you have that ambiguity with the multiple recorders.

4 Further, it is my understanding -- and I was
5 reviewing Woo again -- there is no master recording
6 either. There is a combination that is called editing
7 or edit. So in that case the reliance on specific
8 accurate lock is not as rigid. So one doesn't
9 necessarily have to go -- you know, be that accurate in
10 that context. But if you're trying to make a recording
11 remotely as well as locally and then later be able to
12 frame-accurate and sample-accurate replace digital audio
13 samples, one needs to be in complete synchronization.
14 So that's why I say that GPS is not sufficient.

15 BY MR. PLIES:

16 Q. Now, in your explanation there you mentioned
17 frames and fields.

18 Those are characteristics of a video signal,
19 correct?

20 A. Correct, but has been pointed out that you
21 normally would have to have the audio and video in
22 synchronism. So the audio is linked into the video
23 synchronization.

24 Q. But if I'm -- if I'm designing an audio only
25 system --

1 A. Right.

2 Q. -- that does not have video, then I don't have
3 to worry about frames and field synchronization,
4 correct?

5 MS. CHIPPERSON: Objection.

6 THE WITNESS: Okay. Your question?

7 BY MR. PLIES:

8 Q. Again, I'm not sure -- I'm not sure if there
9 was an answer there.

10 But if I'm designing a system for audio recording
11 only -- and I don't care about video. I'm not recording
12 any video. It's just audio -- right? -- this whole
13 thing about frame and field is not something I need to
14 be concerned with, right?

15 MS. CHIPPERSON: Objection.

16 THE WITNESS: Yes, you do because the timecode
17 carries with it a field flag. So you could be
18 180 degrees out. Same time reference but two field
19 indicators.

20 But I would also comment that in terms of if I'm
21 designing a system, why would I want to overly
22 complicate it? I need to have a GPS receiver. I need
23 to have a video. I need to have some circuitry to
24 create the timecode, which means I need a video
25 generator at least to create the basic field flags. And

1 it's far more efficient to just have one master timecode
2 and synchronize to that.

3 BY MR. PLIES:

4 Q. So are you assuming --

5 A. Point of efficacy, GPS would not be a first
6 choice.

7 Q. Sir, you're assuming, then, that the timecodes
8 need to be SMPT timecodes?

9 A. No. They don't have to be, no.

10 Q. For the 443 patent, Exhibit 3, turning back to
11 Claim 1, how many local audio devices are required to
12 satisfy Claim 1? How many do you have to have to meet
13 the claim?

14 A. At least one.

15 Q. And according to the claim, the local audio
16 device is a recorder -- right? -- because it stores
17 audio data in memory?

18 MS. CHIPPERSON: Objection.

19 THE WITNESS: I believe somewhere in the
20 claims it talks about recording, yes.

21 BY MR. PLIES:

22 Q. Well, if you look, for example, in Claim 1
23 there, at the very bottom of the first column, it talks
24 about the control unit, and it says, "... for creating
25 local audio data from said locally generated audio and

1 storing said local audio data in said memory."

2 Do you see that?

3 A. Yes, I see that.

4 Q. So would that be a recording function of the
5 local audio device?

6 A. Yes.

7 Q. All right. And so since, as you said, we just
8 need one local audio device to satisfy the claim, we
9 just need one recorder to satisfy the claim, correct?

10 MS. CHIPPERSON: Objection.

11 THE WITNESS: Well, I think that the
12 implication is that there is a -- there's a multitrack
13 recorder that is wirelessly connected if we go through
14 all the claims. But for Claim 1 you're suggesting just
15 one recorder.

16 Do I understand that right?

17 BY MR. PLIES:

18 Q. Well, I'm asking you. I mean, I believe
19 you've already indicated that we need one local audio
20 device. And, I believe, you also agreed that that local
21 audio device has a recorder, the storing function.

22 So I'm just asking do I need more than one recorder
23 to satisfy the claim?

24 MS. CHIPPERSON: Objection. Mischaracterizes
25 prior testimony and form.

1 THE WITNESS: So we're talking about -- you're
2 focused on Claim 1; is that correct?

3 BY MR. PLIES:

4 Q. Yes, sir.

5 A. Okay. Okay. Again, what was your question?

6 Q. My question is in order to satisfy Claim 1, do
7 I need more than one recording device?

8 MS. CHIPPERSON: Objection.

9 THE WITNESS: If you take Claim 1 in
10 isolation, then it only speaks of the one recording
11 device. But taking all the claims together, it's clear
12 that one would, you know, understand that you want to
13 have two recordings -- one locally, one remotely -- and
14 they are the audio -- audio created by the performer is
15 recorded in the local device as well as transmitted
16 simultaneously to the remote recording device and that
17 they are locked through the master timecode.

18 BY MR. PLIES:

19 Q. So like, if you look at Claim 7, would Claim 7
20 introduce the idea of having a second or a remote
21 recording device?

22 MS. CHIPPERSON: Objection.

23 THE WITNESS: Yes.

24 BY MR. PLIES:

25 Q. So I don't want to mischaracterize you. So

1 correct me if I'm misunderstanding.

2 From what you testified, my understanding is that
3 from Claim 1 alone, you have to have at least one
4 recording device. But it can be satisfied by one. But
5 then, when we get to, like, deep into Claim 7, now we've
6 introduced the idea that you can have a second recording
7 device.

8 MS. CHIPPERSON: Objection to form.

9 BY MR. PLIES:

10 Q. Is that a fair characterization? Or correct
11 me if I'm wrong.

12 MS. CHIPPERSON: Sorry about that. Objection
13 to form. It mischaracterizes the prior testimony.

14 THE WITNESS: To clarify, Claim 1 speaks of a
15 local audio device wearable by the creator of said
16 locally generated audio and records it. And Claim 7
17 introduces the idea of a group consisting of the
18 recorder, a receiver, and combinations thereof and that
19 the audio device -- the local audio device transmits
20 said local audio consisting of recorder, receiver, and
21 does it wirelessly from at least one local audio device
22 wireless transmitter.

23 BY MR. PLIES:

24 Q. All right. So turning to Exhibit 1, your
25 declaration, I wanted to direct your attention to

1 paragraph 156. So the first sentence of 156 says:

2 "As previously discussed, locally
3 generated audio is audio created by the
4 wearer of the local audio device
5 receiving the locally generated audio.
6 Such audio is suitable for use as an
7 independent track of audio."

8 Do you see that?

9 A. Yes.

10 Q. And is that the construction you applied in
11 forming your validity opinions, correct?

12 A. Yes.

13 Q. All right. So turning to the next paragraph,
14 157. In the second sentence, referring to Strub and
15 Woo, you say, "This is not audio generated or created by
16 the recorder."

17 Do you see that?

18 A. Yes.

19 Q. And if I understand correctly, it's your
20 position that if the audio being recorded is not
21 generated by the recorder, the person wearing the unit,
22 then it does not qualify as locally generated audio,
23 correct?

24 A. In the context of the 443 patent, yes.

25 Q. Now, would you agree that the ordinary meaning

1 of the word "local" refers to a place rather than a
2 person?

3 MS. CHIPPERSON: Objection to form.

4 THE WITNESS: Well, you could say
5 somebody's -- I know him from the location that I'm at
6 currently. So that could be the definition of local, a
7 local person, someone of the region. But I don't think
8 we're here to discuss semantics.

9 In the context of the 443 patent, there's the
10 concept of a local recording of a local -- of a
11 performer because it's a wearable device, and the intent
12 is you're recording that person's performance locally as
13 opposed to wiring the microphone with a long cable back
14 to the remote recorder.

15 BY MR. PLIES:

16 Q. If you just happened to say to a person of
17 ordinary skill, Hey, I'm going to record some locally
18 generated audio, wouldn't the ordinary meaning of that
19 just be I'm going to record some audio that's being
20 generated spatially near the recorder?

21 MS. CHIPPERSON: Objection.

22 THE WITNESS: If I instruct an A2 exactly the
23 way you said and he pointed the microphone away from the
24 performer, that person would be -- would no longer work
25 on that crew. For the use of this device, it's

1 intuitively obvious you're going to mic the performer.
2 And local is a way to say -- to isolate it from the fact
3 that I have a recorder that's remote from that performer
4 or performance.

5 BY MR. PLIES:

6 Q. Okay. You answered a little bit of every
7 question.

8 My question is setting aside -- I know you're
9 relying upon the teachings of the patent. But setting
10 that aside, if you just walked up to someone that had no
11 knowledge of the patent at all and said, I'm going to
12 record some locally generated audio, wouldn't the
13 ordinary meaning of that phrase just be I'm going to
14 record some audio that's being generated spatially near
15 the recorder?

16 MS. CHIPPERSON: Objection. Form. Compound.
17 Calls for speculation. Asked and answered.

18 THE WITNESS: Let me say that your -- you said
19 something about, you know, relying on the patent. I'm
20 also relying on years of experience working in the
21 industry. And given that it's clear what the defined
22 use of the Zaxcom system is, then in that context that
23 informs me to what local and locally generated audio
24 means.

25 In addition, the fact that we're dealing with

1 multitrack recording, which is defined as the recording
2 of individual performances isolated. So unlike Strub,
3 who is attempting to record the ambient sound
4 surrounding the recorder as a way to document their
5 experience -- and, yes, that might also include the
6 recorder's own voice, but there's much about recording
7 the audio and using things like being able to use beam
8 steering and such to isolate the audio of others.

9 And similarly in Woo, the recording all is of a
10 performance but not individuals in the performance. And
11 it's really talking about recording from different
12 angles. And that, quite frankly, speaks more of image
13 recording than it does sound recording.

14 BY MR. PLIES:

15 Q. All right. So just so I understand. If you
16 went up to a person of ordinary skill who had no
17 knowledge of the patent and you said that you were going
18 to record some locally generated audio, you think that
19 person would understand that to mean that you're going
20 to put a mic on a particular person and record the audio
21 of just that person?

22 MS. CHIPPERSON: Objection to form. Compound.
23 Mischaracterizes the prior testimony. Asked and
24 answered. And it's cumulative and harassing.

25 ///

1 BY MR. PLIES:

2 Q. Let me rephrase. Let me rephrase.

3 A. Okay. Go ahead, rephrase. I'm sorry.

4 Q. Okay. For somebody who had no knowledge of
5 the disclosure of the 443 patent and you said, Hey, I
6 need you to -- I need you to record some locally
7 generated audio, how would they understand locally
8 generated audio? What would that mean to them?

9 MS. CHIPPERSON: Objection. Form. Compound.

10 BY MR. PLIES:

11 Q. Again, they don't have the benefit of reading
12 the spec of the 443 patent. All you're doing is saying
13 I need to record some locally generated audio.

14 What would that mean?

15 MS. CHIPPERSON: Hold on, Jim.

16 Objection to form. Compound. Vague. Asked and
17 answered. Cumulative and harassing.

18 THE WITNESS: Okay. If I hand a belt pack
19 with a microphone to an A2, which is a crafts person on
20 set, and I say, Please put this on the -- on that actor
21 and mic them up, they would mic that actor. They would
22 not push -- they would not make it so the microphone's
23 picking up, say, ambient sound or another actor.

24 BY MR. PLIES:

25 Q. All right. I'm going to object as

1 unresponsive. You're answering a different question.

2 All right. We'll move on. So on paragraph 157 of
3 your declaration, you see where you cite Strub at
4 column 22, line 16 to 33?

5 A. No, I don't see.

6 Q. All right. So there's a sentence there, like
7 the third sentence. It says, "For example, Strub at
8 22:16 to 33 describes the recordation of sound to be for
9 sound coming from in front of the recorder."

10 So you see that?

11 A. Yeah. Okay. Yes, I do.

12 Q. As I understand it, your position is that this
13 paragraph shows that the recording device in Strub isn't
14 recording the sound of the wearer but recording the
15 sound generated by other people in front of the wearer?

16 MS. CHIPPERSON: Objection.

17 THE WITNESS: Or other events or background
18 sound or whatever, whatever it happens to be recording.

19 BY MR. PLIES:

20 Q. Okay. Well, let's take a look at Strub. So
21 I'll drop Strub into the chat at Exhibit 4.

22 (Petitioners' Exhibit No. 4 marked for identification
23 purposes and made part of the record.)

24 BY MR. PLIES:

25 Q. All right. So Exhibit 4 is the Strub patent

1 number 6,825,875. Let's go to column -- let's go to
2 that citation that you have in your report.
3 [Indiscernible] as to column 22. And it was 16 to 33.
4 So it's this paragraph here.

5 All right. And so in your report, as we just saw
6 in your declaration, you're citing this portion here at
7 the beginning of the paragraph that talks about the
8 mounting of the audio data acquisition device so that
9 primarily sounds from in front of the recorder are
10 recorded.

11 That's what you rely on?

12 A. Right.

13 Q. Okay. Now, if you read down a few lines, you
14 see the little Roman numeral (i)? It says, "A person or
15 persons with whom a recorder is having a conversation
16 will typically be in front of the recorder."

17 Do you see that?

18 A. Yes.

19 Q. So now if the recorder is having a
20 conversation with a person in front of them, then the
21 recorder is also generating audio -- right? -- which
22 would be their side of the conversation, correct?

23 A. Yes.

24 MS. CHIPPERSON: Objection.

25 ///

1 BY MR. PLIES:

2 Q. So the recording device is recording audio of
3 the person wearing the recording the unit, their side of
4 the conversation; isn't that correct?

5 MS. CHIPPERSON: Objection.

6 THE WITNESS: Yes.

7 BY MR. PLIES:

8 Q. Okay. And then I want to direct your
9 attention on Strub again to Figure 1.

10 What's your understanding of what's been depicted
11 in Figure 1 of Strub?

12 A. Figure 1 in Strub is for people wearing a
13 backpack.

14 Q. All right. So 101 to 104, those are what
15 Strub says are the participants at an event; is that
16 right?

17 A. I believe Strub refers to them as recorders.
18 But yes, they're participants.

19 Q. Okay. And then in 105 to 108 Strub describes
20 those as recording units, correct?

21 A. Yes.

22 Q. So if we assume that persons 104 to 108 are
23 speaking or singing or making noise at an event, the
24 recordings made by each of those recorders, 105 to 108,
25 won't those all be different at least because, you know,

1 each recorder is spatially located in a different
2 position from the other recorders and will receive sound
3 from the four participants differently?

4 A. Well, there's a lot of assumption in that.
5 One assumption is that they're all -- as it's shown in
6 the diagram, they're all standing together, but, but
7 maybe they're not. Maybe they're far apart. The other
8 thing to point out is that the device -- the recording
9 device that's in Figure 1 is not equivalent to the
10 Zaxcom belt pack in that that is simplified -- that's
11 his simple version of it, which has no RF or any other
12 way to transmit data. So it's not -- not relevant to
13 the Zaxcom patents.

14 Q. I know that's your position, but I don't think
15 it's important for the point I'm asking about. Right.

16 So let's assume -- let's assume -- granted maybe
17 you disagree. But let's assume that recorders 105 to
18 108 can record audio, and let's also assume that these
19 participants are each speaking or singing or making some
20 sort of noise.

21 So my question is, with those assumptions, wouldn't
22 the recording being made by each of the recording units,
23 105 to 108, be different?

24 MS. CHIPPERSON: Objection to form.

25 ///

1 BY MR. PLIES:

2 Q. You know, if -- for example, if you took those
3 recordings and put them on an oscilloscope or ran them
4 through an FFT and looked at them, they're going to be
5 different -- right? -- because the recording units are
6 all in different spatial locations and are capturing the
7 sound differently?

8 MS. CHIPPERSON: Objection. Form. Calls for
9 speculation.

10 THE WITNESS: Yes. But if I may further
11 amplify, they are not equivalent to what is referenced
12 to local audio in the 443 patent because you can't
13 isolate the individual voices. If I were to take those
14 recordings and bring them into a sound playback room and
15 ask the operator to -- I want you to isolate each voice
16 separately because maybe we're to going to substitute or
17 maybe there was a problem with one of those voices, none
18 of those recordings will be of use because I can't
19 isolate the sound.

20 The point of recording the performer locally and
21 only providing the local audio of that performer is so
22 that I can later mix it to whatever degree I wish or fix
23 it or manipulate it or adjust levels. And therefore,
24 Strub does not provide a solution that a POSA would
25 adopt and develop the device that we're talking about in

1 Zaxcom.

2 BY MR. PLIES:

3 Q. But, again, looking at Strub Figure 1. The
4 record -- the audio recordings made by each of those
5 recording units would be independent of each other --
6 correct? -- because they're receiving the sound
7 differently and creating different recordings. You
8 would see that on an oscilloscope or an FFT. They're
9 different independent recordings because they're
10 spatially located at different positions; is that right?

11 MS. CHIPPERSON: Objection to form. It also
12 assumes facts not in evidence. Speculative. Asked and
13 answered.

14 THE WITNESS: Yes, by the nature of them being
15 individuals. And as the diagram suggests, they're not
16 all facing each other. So you're right, it's not going
17 to have the same -- it's not going to pick up the same
18 sounds in exactly the same way.

19 THE REPORTER: Counsel, we've been going about
20 an hour and half. Any chance you're a good spot to take
21 a little break?

22 MR. PLIES: Yeah. That's fine. You want to
23 take a five, ten-minute break.

24 (Discussion off the record.)

25 (A break was taken.)

1 BY MR. PLIES:

2 Q. All right. So we're resuming.

3 Mr. DeFilippis, in some of your previous answers,
4 were you suggesting that locally generated audio is
5 exclusively and only the audio generated by the wearer
6 of the recording unit?

7 MS. CHIPPERSON: Objection.

8 THE WITNESS: Yes. Yes.

9 BY MR. PLIES:

10 Q. And if we look at Exhibit 3, the 443 patent,
11 for example, so Claim 1 of the 443, is there any express
12 or explicit requirement in the claim language itself
13 that the locally generated audio must only be audio from
14 the recorder?

15 MS. CHIPPERSON: Objection.

16 THE WITNESS: Well, the second clause, "at
17 least one local audio device wearable by a creator of
18 said locally generated audio including." So I think
19 that ties it together.

20 BY MR. PLIES:

21 Q. But does that preclude others from also
22 generating audio that's being recorded?

23 MS. CHIPPERSON: Objection.

24 THE WITNESS: Well, microphones have a wide --
25 sometimes have a wide pattern of pickup. So it might

1 pick up audio in the vicinity. But the intent is with
2 proper mic techniques, it's predominantly capturing the
3 performance of the wearer of the body pack, the local
4 device.

5 BY MR. PLIES:

6 Q. So I'm referring to paragraph 164 and 165 in
7 your declaration, Exhibit 1. And feel free to refresh
8 your recollection of these.

9 But I think in some of your answers a little while
10 ago, you were already kind of alluding to this issue,
11 which is it's my understanding that with respect to the
12 claim term "wearable," that your argument is that the
13 Strub passages that are relied upon in the petition for
14 a wearable recording unit, I believe it's your
15 contention that those are only referring to a basic
16 recording unit rather than to an enhanced recording unit
17 that would include the claim elements.

18 MS. CHIPPERSON: Objection.

19 BY MR. PLIES:

20 Q. Is that a fair -- characterization?

21 MS. CHIPPERSON: Objection to form.
22 Mischaracterizes prior testimony.

23 THE WITNESS: Whether we're talking about the
24 basic unit or we're talking about the fully enabled --
25 or "fulled" unit that Strub describes, it is not, in our

1 definition, wearable. In fact, Strub uses the word
2 "portable." So we -- we don't feel -- I don't feel that
3 that is -- as taught by Strub is not a device suitable
4 to be made into a body pack as the Zaxcom's device is.

5 BY MR. PLIES:

6 Q. I understand that one of your arguments is
7 that the basic recording unit of Strub doesn't include a
8 lot of the claim elements, and it's that basic unit that
9 you contend is what's being described as wearable?

10 MS. CHIPPERSON: Objection to form. Assumes
11 facts not in evidence. Mischaracterizes prior
12 testimony.

13 BY MR. PLIES:

14 Q. Is that not your argument?

15 A. I'm sorry. Repeat the question. Thank you.

16 Q. Yeah. My understanding is that one of your
17 arguments is that the recording unit described as being
18 wearable in Strub, according to you, is referring to
19 only the basic recording unit which lacks many of the
20 claim elements.

21 Is that a fair characterization of your position?

22 MS. CHIPPERSON: Objection to form.

23 THE WITNESS: It is not wearable in the
24 context of the Zaxcom patents. And I would point to, as
25 you did in Figure 1, that it has to have some sort of

1 wearable harness in order to be able to carry the
2 equipment necessary, and thus is not a body pack.

3 BY MR. PLIES:

4 Q. All right. So let me refer you to your
5 declaration in paragraph 165, which is on the screen.
6 At the very top there's a sentence at the beginning of
7 the bottom of page 33 which says:

8 "Furthermore, Strub at column 66,
9 lines 33-51, does not describe
10 wearability of a recording unit with a
11 receiver because it describes a, quote,
12 'data acquisition device,' unquote,
13 which is the acquisition device used in
14 the basic Strub recording unit,
15 therefore failing to disclose a
16 recording unit which includes a receiver
17 or transmitter."

18 Do you see that?

19 A. Yes.

20 Q. So as I understand it, you're saying that this
21 citation at column 66 is describing the wearability of a
22 basic unit, not an enhanced unit, and therefore it lacks
23 some of the claim elements?

24 MS. CHIPPERSON: Objection. Form. Compound.
25 Vague. Assumes facts not in evidence.

1 BY MR. PLIES:

2 Q. Is that not your argument?

3 MS. CHIPPERSON: Same objections.

4 THE WITNESS: Sorry. Could you repeat the
5 question.

6 BY MR. PLIES:

7 Q. Right. So the sentence that we just read
8 about Strub's disclosure in column 66, I understand that
9 your argument is that that disclosure is only referring
10 to the basic recording unit, and therefore lacks some of
11 the claim elements.

12 MS. CHIPPERSON: Objection. Form. Compound.
13 Vague.

14 BY MR. PLIES:

15 Q. And is that a correct understanding of your
16 argument here?

17 MS. CHIPPERSON: The same objections.

18 THE WITNESS: Right. But it's also that it's
19 unclear in Strub about what the wearable apparatus is
20 that they're referring to when they say wearable because
21 they talk about things that could be attached such as
22 things like cameras and microphones.

23 BY MR. PLIES:

24 Q. Well, let's look at this passage in column 66
25 that --

1 A. Okay.

2 Q. -- you appear to argue applies only to the
3 basic recording unit. So let's go to Strub, which is
4 Exhibit 4, and let's go to column 66. And so 33 to 51
5 is this paragraph, roughly in the middle.

6 So first, the penultimate sentence of that
7 paragraph, beginning with "additionally" at line 45
8 reads:

9 "Additionally, enclosing those
10 components within a flexible encasement
11 can be advantageous since the
12 flexibility may make the recording unit
13 more comfortable to wear and may enable
14 the recording unit to be made even more
15 compact."

16 Do you see that?

17 A. Yes.

18 Q. So this sentence is indicating that there is a
19 recording unit that's wearable in Strub, right?

20 MS. CHIPPERSON: Objection.

21 BY MR. PLIES:

22 Q. Now, I understand that you dispute what
23 recording unit that is.

24 But it is disclosing that there is a wearable
25 recording unit, correct?

1 MS. CHIPPERSON: Objection. Vague. Form.

2 THE WITNESS: Well, it says it's wearable with
3 modification. So the recording unit, whatever --
4 whatever it is, is not in and of itself wearable. It
5 needs to be modified.

6 There's very little to go on as to what that
7 modification would be to make it wearable. And given
8 the nature of the recording devices mentioned in Strub,
9 it could not be made into a body pack, which is
10 something of -- it could either be fit in a pocket, be
11 attached to a belt clip, and be, you know, very fairly
12 lightweight in the range of six to seven ounces.

13 BY MR. PLIES:

14 Q. Now, as we saw from your declaration, you
15 assert that this paragraph in column 66 is referring to
16 the basic recording unit that doesn't have final
17 elements like a receiver or transmitter.

18 Do you recall that?

19 A. Yes.

20 Q. Okay. And we can go back to your declaration
21 and look. But the basis of your position, as I
22 understood it, was that this passage is referring to the
23 basic recording unit because it refers to a data
24 acquisition device. So you can see that, for example,
25 in line 36, data acquisition device.

1 And as I understand your position is, when you go
2 to -- when you go to the Strub figures, Figure 2 shows
3 the data acquisition device, and Figure 2 is the basic
4 recording unit. So, therefore, your conclusion is since
5 that passage is talking about a data acquisition device,
6 it's referring to Figure 2, which is the basic recording
7 unit.

8 Do I have your position correct?

9 MS. CHIPPERSON: Objection to form.

10 THE WITNESS: Yes.

11 BY MR. PLIES:

12 Q. All right. And Figure 3 is the enhanced --
13 what Strub calls the enhanced recording unit, correct?

14 MS. CHIPPERSON: Objection to form. Assumes
15 facts not in evidence.

16 THE WITNESS: Yes.

17 BY MR. PLIES:

18 Q. All right. But if we look at the bottom of
19 Figure 3, when you see boxes 303 and 302, those are data
20 acquisition devices as well, right?

21 A. That's the way they're labeled, yes.

22 Q. Right. So it's not fully correct that
23 Figure 2 discloses data acquisition device but Figure 3
24 doesn't. Figure 3 also discloses data acquisition
25 devices, both video and audio, correct?

1 MS. CHIPPERSON: Objection. Mischaracterizes
2 prior testimony.

3 THE WITNESS: Well, the fact that they're
4 labeled differently would lead one to believe that
5 they're not the same devices, if that's the intent of
6 your question. We're left to guess as to what exactly
7 the data acquisition device is and what's it
8 recording -- or capturing. Sorry.

9 BY MR. PLIES:

10 Q. Well, Figure 2, the basic recording unit is
11 using the genus term "data acquisition device," right?

12 MS. CHIPPERSON: Objection to form. Calls for
13 speculation.

14 THE WITNESS: Are you using the term "genius"
15 [sic] in the common sense, or is that a specific.

16 BY MR. PLIES:

17 Q. Would it be fair to say that "data acquisition
18 device" is a genus, family --

19 MS. CHIPPERSON: Objection. Sorry.

20 BY MR. PLIES:

21 Q. -- and in Figure 3 audio and video data
22 acquisition devices are species of that genus?

23 MS. CHIPPERSON: Objection. Form. Vague.
24 Assumes facts not in evidence.

25 THE WITNESS: Okay. What does it say in the

1 specification as to what two -- what the data
2 acquisition device is recording. It doesn't -- it
3 doesn't specify what the data acquisition device is
4 acquiring other than generically data.

5 BY MR. PLIES:

6 Q. But data can include audio or video.

7 A POSA would understand that, right?

8 MS. CHIPPERSON: Objection.

9 THE WITNESS: It's unclear in Strub whether
10 the capture of audio and video is in an analog format or
11 a digital format. And if it's in an analog format, it
12 is unclear from this diagram whether -- and the
13 specification whether the data acquisition includes the
14 process of converting analog to digital.

15 So to answer your question, it's unclear whether
16 it's recording -- whether it's capturing audio and video
17 data.

18 BY MR. PLIES:

19 Q. Well, with the data acquisition device 202 in
20 Figure 2, is it your view that that would exclude audio
21 acquisition devices and video acquisition devices?

22 MS. CHIPPERSON: Objection to form. Asked and
23 answered. Calls for speculation.

24 THE WITNESS: I'm just saying it's unclear.

25 ///

1 BY MR. PLIES:

2 Q. But as I understand your argument, because
3 Figure 3 for the enhanced recording unit doesn't recite
4 data acquisition device as a genus, that the passage in
5 column 66 is referring to only Figure 2?

6 MS. CHIPPERSON: Objection to form. Assumes
7 facts not in evidence. Mischaracterizes prior
8 testimony. Asked and answered. This is cumulative and
9 harassing, and it calls for speculation.

10 THE WITNESS: Whatever the data acquisition
11 device is, it is not clear in the specification what
12 exactly the data acquisition device is capturing.

13 BY MR. PLIES:

14 Q. Okay. But I just want to be clear here.
15 Is it correct that your position with respect to
16 this passage in column 66 is that, because it recites
17 data acquisition device, it must be referring only to
18 Figure 2 and not to Figure 3 even though Figure 3
19 recites audio data acquisition device and video
20 acquisition device?

21 MS. CHIPPERSON: Objection. Assumes facts not
22 in evidence. Asked and answered. Cumulative and
23 harassing. Calls for speculation.

24 MR. PLIES: Let me make this real easy for
25 you. Let's just have a standing objection agreement

1 that all those objections are for every question in the
2 deposition. That way you don't have to make them.

3 MS. CHIPPERSON: We can't do that.

4 MR. PLIES: Why not?

5 MS. CHIPPERSON: And I'm not objecting to
6 every question. Just the ones that require it. So no,
7 I don't agree to that.

8 MR. PLIES: So you don't -- okay. So you
9 don't want a standing objection?

10 MS. CHIPPERSON: I've never heard of that,
11 honestly. I don't know the ramifications of that. So
12 I'm not prepared to agree to something like that on the
13 spur of the moment.

14 BY MR. PLIES:

15 Q. Mr. DeFilippis, have you formulated an answer
16 to the question?

17 A. I really apologize, but could you repeat the
18 question.

19 Q. Yeah. All right. So the passage that we
20 looked at in column 66 of Strub --

21 A. Yes.

22 Q. -- it's my understanding that your argument is
23 that because that passage refers to, quote, "data
24 acquisition unit," unquote -- I'm sorry -- "data
25 acquisition device" that that passage is referring only

1 to the basic recording unit as shown in Figure 2 and not
2 to the enhanced recording unit in Figure 3 even though
3 in Figure 3 it depicts an audio data acquisition device
4 and a video acquisition device?

5 MS. CHIPPERSON: Same objections as the prior
6 objection.

7 THE WITNESS: I'm going over my declaration.
8 This part of it was to talk about -- was really
9 addressing the wearability. And --

10 BY MR. PLIES:

11 Q. I think the relevant discussion is most -- I
12 mean, you're free to review whatever you want, but I
13 think 165 has got most of the relevant discussion there.

14 A. Right. But it's not necessarily focused on
15 the basic or the enhanced version. It's discussing the
16 wearability. Although, you're right, the data
17 acquisition device is used in the basic Strub recording
18 unit.

19 Did he freeze?

20 Q. No. I thought you were reading your
21 declaration to formulate the answer.

22 A. I thought I gave my answer.

23 Q. Yeah. I don't think I got an answer to the
24 question yet.

25 So -- first of all, is it your position that the

1 basic recording unit does not disclose all the claim
2 elements?

3 MS. CHIPPERSON: I'm sorry. I didn't hear the
4 last part of that question.

5 BY MR. PLIES:

6 Q. Is it your position that the basic recording
7 unit of Strub does not disclose all the claim elements
8 such as the transmitter and receiver?

9 MS. CHIPPERSON: Objection. Vague.

10 THE WITNESS: I'm going to say yes.

11 BY MR. PLIES:

12 Q. Okay. And is my understanding correct that
13 your argument is that the passage at column 66 of Strub,
14 which, as we saw, refers to wearing a recording unit,
15 would only apply to that basic recording unit as opposed
16 to an enhanced recording unit?

17 MS. CHIPPERSON: Objection to form. Asked and
18 answered. Cumulative and harassing.

19 THE WITNESS: I would say that that paragraph,
20 which starts in column 66 -- actually paragraph --
21 "Packaging of Recording Unit Components" -- is not
22 specific to either of the implementations.

23 BY MR. PLIES:

24 Q. So you're saying that it's not for the basic
25 recording unit either?

1 A. No. I'm saying it's not clear which one it's
2 talking -- if it's talking about the basic, the
3 enhanced, or both.

4 Q. Well, column -- I'm sorry -- in paragraph 165
5 of your report, that last sentence at the bottom of 33
6 where it says:

7 "Furthermore, Strub at 66:33-51 does not
8 describe wearability of a recording unit
9 with a receiver because it describes a
10 data acquisition device, which is the
11 acquisition device used in the basic
12 Strub recording unit, thereby failing to
13 disclose a recording unit which includes
14 a receiver or transmitter."

15 So aren't you saying that to the extent that
16 column 66 discloses a wearable recording unit, you're
17 saying that -- but that's the basic recording unit.
18 That doesn't have the transmitter or receiver in it?

19 MS. CHIPPERSON: Objection to form. Asked and
20 answered. Cumulative and harassing.

21 THE WITNESS: However, following into
22 paragraph -- into column 67, which is part of that same
23 section, it talks about GPS receiver and other parts of
24 the device which infer -- could infer to the enhanced
25 version. But you're correct. In my citation, that

1 would refer to the basic unit.

2 BY MR. PLIES:

3 Q. Okay. And the reason you conclude that in
4 your declaration is because that passage in column 66
5 describes a, quote, unquote, "data acquisition device."
6 And column 2 -- I'm sorry -- in Figure 2, as we saw, the
7 basic unit has, quote, unquote, "data acquisition
8 device," which leads you to believe that that's what
9 it's describing, the basic recording unit; is that
10 correct?

11 MS. CHIPPERSON: Objection to form. Compound.
12 Vague. Asked and answered. Cumulative and harassing.

13 THE WITNESS: I think my reading of that whole
14 section is there are several components that are
15 mentioned, and it seems to be referring to what you're
16 showing in Figure 2. However, there are elements that
17 are not shown in Figure 2 that are also mentioned. So,
18 again, I would say the general read of Section 10 of the
19 specification of Strub, it is not clear whether they're
20 only referring to the basic unit.

21 BY MR. PLIES:

22 Q. You mentioned that there's some components
23 recited in column 66 that are not in Figure 2.

24 Which components are those?

25 A. I'm going broader than that. I'm looking

1 at -- if you look at -- starting at column 66 at 26, it
2 says, "Section 10. Packaging of Recording Unit
3 Components." It follows into column 67. And at
4 line 12, "small components of a recording unit --
5 microphones, GPS receiver, video camera -- can be sewn
6 into clothing."

7 So, again, the Figure 2 does not show a GPS
8 receiver. There are GPS, I think, in -- well, maybe.
9 Let's see. In the more enhanced version. Well, they
10 have position-sensing device, which one might infer is
11 the GPS receiver.

12 Again, I'm only saying that it's not clear. But it
13 certainly includes the basic recorder.

14 Q. Right. And the position-sensing device,
15 that's in Figure 3 -- right? -- the enhanced recorder?

16 A. Right.

17 Q. And then if we look in column 66 right around
18 line 35, it talks about components of the recording
19 unit. And then it talks about the data acquisition
20 device that we already mentioned. It also refers to a
21 display device.

22 A. Right.

23 Q. Does Figure 2 have a display device?

24 A. Does Figure 2 have a display device? What's
25 Figure 2, again? No, it doesn't.

1 Q. What about Figure 3? Does Figure 3 have a
2 display device?

3 A. Yes.

4 Q. What would that be?

5 A. Video recording display device, 306.

6 Q. Paragraph 167 of Exhibit 1, your declaration,
7 the first line says:

8 "Strub also fails to disclose a local
9 audio device that is suitable to be worn
10 by a performer as required by a proper
11 construction element 1[B]."

12 Do you see that?

13 A. Yes.

14 Q. I want to explore with you what you mean by
15 "performers." The last line of that same paragraph
16 talks about worn during filming of performances. So I
17 would take it that you're suggesting that, like, actors
18 on a -- on a set are performers.

19 Is that -- is that accurate?

20 MS. CHIPPERSON: Objection.

21 THE WITNESS: Yes. They are an example of a
22 performer, yes.

23 BY MR. PLIES:

24 Q. What are other examples of performers?

25 A. Performers could be singers, dancer,

1 musicians, announcers, news reporters, referees on a
2 field of play.

3 Q. Athletes?

4 A. Yes, athletes could be.

5 Q. How about someone singing happy birthday at a
6 party? Would they be a performer?

7 A. You mean just an average person at a party and
8 you're recording their singing happy birthday?

9 Q. Yeah. You're at your grandkid's house for
10 their birthday party, and people start singing happy
11 birthday and it's being recorded.

12 Are you a performer?

13 A. Well, one might say they're performers, but no
14 one in my family has a really good singing voice. So I
15 don't know that you would want to record that. But,
16 yeah, they're performers.

17 Q. Is there any limits or requirement as, like,
18 the number of people that are observing someone in order
19 for them to be considered to be a performer?

20 A. No, there's no need for a certain number of
21 people. It could be -- it could be someone is on the
22 stage alone and they're doing a rehearsal and you're
23 recording them.

24 Q. Okay. [Audio distortion].

25 (Reporter clarification.)

1 BY MR. PLIES:

2 Q. We're looking at Exhibit 3, 443 patent,
3 Claim 1. So if you look at element B -- right? -- it
4 says, "At least one local audio device wearable by a
5 creator of said locally generated audio."

6 Do you see that?

7 A. Yes.

8 Q. All right. So is the creator -- does that
9 have the same meaning as performer? Are those synonyms?

10 A. In that context, yes.

11 Q. And why is that?

12 A. Why is the creator of the audio also the
13 performer?

14 Q. Yeah. Why are they synonyms?

15 A. Well, the -- the purpose is to record sound.
16 Something or someone has to create that sound. And the
17 purpose of which is to capture that sound of a
18 performance. So, again, they're synonyms in this case.

19 Q. In ordinary usage, are the terms "creator" and
20 "performer" coextensive?

21 A. No. I mean, there's many contexts where
22 [indiscernible]. They may be, you know, the general
23 case not the same, no.

24 Q. So the every day, ordinary meaning may be
25 different. But it's your view that when read in the

1 context of the patent, it's synonymous with performance?

2 A. Yes.

3 Q. All right. Let me introduce Exhibit 5, which
4 is the 207 patent.

5 (Petitioners' Exhibit No. 5 marked for identification
6 purposes and made part of the record.)

7 BY MR. PLIES:

8 Q. So let me drop that into the chat so everybody
9 has it. And let's go to Claim 17 of the 207 patent,
10 Exhibit 5.

11 All right. So do you see that Claim 17 begins with
12 "at least one audio device wearable by a user."

13 Do you see that?

14 A. Yes.

15 Q. So here does "user" -- is that synonymous with
16 performer?

17 A. In this context, yes.

18 Q. Would you agree that in ordinary parlance, a
19 user doesn't have to be somebody that's generating
20 audio?

21 A. Well, if they're not generating sound, why
22 would they -- why would we put a belt -- why would we
23 put a body pack and mic them up?

24 Q. Well, couldn't I be a user if I wear the body
25 pack and I have a directional mic pointing forward and

1 I'm recording the performance of somebody else? Doesn't
2 that make me the user of the device, but somebody else
3 would be the performer?

4 MS. CHIPPERSON: Objection.

5 THE WITNESS: Again, the context of user in
6 this patent -- again, going back to Claim 1, which talks
7 about creator -- the intent is that someone who is part
8 of a -- he's a performer and you're mic'ing them up with
9 a body pack for the ability to record their audio,
10 locally generated audio.

11 BY MR. PLIES:

12 Q. But can't a user just be somebody who's
13 operating the equipment rather than being the person
14 that's generating the audio that the equipment is
15 recording?

16 A. Are you asking me is it physically possible?

17 Q. Well, would you agree that that's at least a
18 viable ordinary meaning of user?

19 MS. CHIPPERSON: Objection. Calls for
20 speculation.

21 THE WITNESS: Again, the context in the -- in
22 the claims, you know, starting with Claim 1, is that we
23 are -- device is intended to be used to capture the
24 performance of the sound and audio from a performer, a
25 creator. And I think the common sense use of the word

1 user is just to substitute and saying that that person
2 is using that audio device for the purpose of capturing
3 their performance.

4 BY MR. PLIES:

5 Q. Okay. So if I understand what you're
6 saying -- you're saying that the word "performer",
7 "creator," and "user" are all synonymous for purposes of
8 the patent?

9 A. For the purpose of this patent, yes.

10 Q. Looking at Exhibit 1, your declaration, at
11 paragraph 168, do you see about midway in -- on page 36
12 you talk about Strub teaching recording that weighs 24
13 pounds?

14 A. Right.

15 Q. Could you carry 24 pounds around in a
16 backpack?

17 A. Maybe.

18 Q. Do you think most adult males could?

19 MS. CHIPPERSON: Objection. Calls for
20 speculation.

21 THE WITNESS: The operative word there is
22 "carry." And, you know, it may be possible for most
23 adult males and females to carry 24 pounds.

24 BY MR. PLIES:

25 Q. What do you think are the heaviest components

1 of the Strub recording unit?

2 MS. CHIPPERSON: Objection. Calls for
3 speculation.

4 THE WITNESS: Which -- which unit are we
5 talking about? The basic unit or the full --

6 BY MR. PLIES:

7 Q. Let's talk about the enhanced one, the fancy
8 one, Figure 3.

9 A. Right. Yeah.

10 MS. CHIPPERSON: Same objection.

11 THE WITNESS: Well, there's many elements
12 there. You know, each one of them adds to the full
13 weight of the Strub apparatus, right. So, you know,
14 you're -- you know, you've got many such things. But I
15 would say at the time that this patent -- at the time we
16 are referring to 2000 -- transmitters, receivers, of the
17 nature that Strub defines would be -- provide
18 significant weight.

19 I would say actually the biggest weight factor is
20 probably the batteries. Since you're limited to
21 nickel-metal hydride batteries of limited duration, you
22 need a lot of them to have a, you know, two-hour or so
23 recording. So I would think -- I would think the
24 batteries add significant weight.

25 ///

1 BY MR. PLIES:

2 Q. What about a video data acquisition device?

3 MS. CHIPPERSON: Objection.

4 THE WITNESS: Again, it depends on what that
5 device is. It could be 10 to 12 pounds. It could be,
6 you know, under a pound, depending on what -- the
7 quality and the effort, the lenses used. There are many
8 factors.

9 BY MR. PLIES:

10 Q. Now, in terms of transmitters and receivers.
11 In 2000 couldn't those be purchased as IC chip sets?
12 Like, for -- for example, 802.11 WiFi or GSM or 900
13 megahertz cordless phones? Couldn't you get transmitter
14 receivers on IC chip sets?

15 MS. CHIPPERSON: Objection.

16 THE WITNESS: Well, possibly. They have to be
17 integrated into the system. But the problem is those
18 technologies were never designed for realtime video and
19 audio transmissions. They were designed for packetized
20 data or voice.

21 So if the intent is to have a fairly good quality
22 and to do it in realtime without interruption, without,
23 you know, delay and packet loss, then those technologies
24 probably wouldn't apply.

25 ///

1 BY MR. PLIES:

2 Q. Why? Because they don't have sufficient
3 realtime bit rate to support the video?

4 A. Well, they might have the bit rate, but
5 it's -- once you get into the protocols used, they're
6 not designed for realtime -- you know, for continuous
7 realtime transmission. They're assuming some pause in
8 the transmission -- buffering, acknowledgments -- and
9 that could cause loss of signals, loss of information.

10 Q. But isn't GSM realtime?

11 A. It's sufficiently realtime for telephonic
12 sound, for telephone calls.

13 Q. So what's your problem? That it doesn't
14 support the video?

15 A. I don't have a problem. You started with the
16 weight issue. And I said that the main problem was
17 going to be battery in order to keep the device running
18 for, like, two hours or more. And there's a lot of
19 features and functionality here.

20 There's also an issue of -- speaking of
21 transmission and reception, it's multiple transmitters,
22 multiple receivers, and there's distance limitations.
23 All of that combined makes it problematic.

24 Q. Certainly back on the weight issue. So you
25 talked about the video the transmitter receiver and the

1 video data acquisition. There's also a video recording
2 display device.

3 What's your view on that? Would that contribute
4 meaningfully to the weight or not?

5 MS. CHIPPERSON: Objection.

6 THE WITNESS: It could. It could be -- it
7 could be significant. Certainly power is another
8 problem unless, you know --

9 BY MR. PLIES:

10 Q. A video recording -- I'm sorry.

11 A video recording display device, would that be,
12 like, a monitor?

13 A. Well, if it's going to record, it has -- I'm
14 sorry. Go ahead.

15 MS. CHIPPERSON: No. You're good. I'm
16 just -- just objection.

17 THE WITNESS: Okay. The monitor may or may
18 not. It typically does not have recording capability.
19 But if it did, let's say grafts it on, then that would
20 add to the weight and the power consumption.

21 BY MR. PLIES:

22 Q. So you mentioned power consumption.

23 What components do you think would consume the most
24 power in the enhanced recorder unit of Figure 3?

25 MS. CHIPPERSON: Objection.

1 THE WITNESS: Transmitter. Sorry.
2 Transmitter, the receiver, the recording devices.
3 Perhaps the acquisition devices. Well, definitely the
4 video acquisition.

5 BY MR. PLIES:

6 Q. I want to ask you about post recording.
7 Would -- would a stereo audio file having left and
8 right channels be considered a multitrack file?

9 A. Could be.

10 Q. For example, let's say I had a duet of
11 singers -- right? -- and I put the first singer into the
12 left channel and the voice of the second singer into the
13 right channel, would the resulting stereo be a
14 multitrack recording?

15 A. It would be if you ensure that there is no
16 interchannel processing involved. So some audio
17 compression schemes, in order to save on bits, will -- I
18 don't want to say combine. But they will process the
19 left or right channels if they find redundant
20 information, for instance. So they'll just, you know,
21 bring -- typically what they do is create what's, you
22 know, a mono center channel to be able to officially
23 compress it. So you get -- effectively, you get bleed
24 through from the left or right channel.

25 If it's intended as a stereo file, that's not a

1 problem. If you're doing what you suggest, which does
2 happen -- and we usually refer to that as dual mono --
3 just to be clear that we don't want any stereo
4 processing involved.

5 Q. So in your view, what are all the requirements
6 for something to be considered a multitrack audio file?
7 What boxes do I have to check to make sure it's a
8 multitrack audio file?

9 A. Okay. You need more than -- you need
10 obviously -- you could have a one-track multitrack, but
11 that's obviously not of much use. So you need, you
12 know, multiple tracks, more than one. They have to be
13 isolated and independent, and they have to have content
14 that is separable in and of itself.

15 So if you use your duet, if I only record the two
16 of them as a single track, that would still record on a
17 multitrack recorder, but it may not be sufficient for
18 the post-production processing that -- you know, you're
19 trying to mix down a song and you want those two
20 performers separated.

21 Q. Anything else?

22 A. They should be time coincident. So they're in
23 time synchronization.

24 Q. Multiple tracks, they're isolated and
25 independent, they have separable content, and they're

1 time synchronized?

2 A. Right.

3 Q. Do you know when stereo recording and mixing
4 first became commonplace?

5 A. Sometime in the 1960s.

6 Q. All right. Let me introduce another exhibit.
7 So I'm going to introduce Winningstad. So let me try
8 and drop it into the chat.

9 Okay. I just sent that to circulate. So I'll mark
10 as Exhibit 6 Winningstad.

11 (Petitioners' Exhibit No. 6 marked for identification
12 purposes and made part of the record.)

13 BY MR. PLIES:

14 Q. For the record Winningstad is U.S. patent
15 7,483,485.

16 All right. Then for context, let's go back to your
17 declaration in paragraph 201.

18 All right. So in this paragraph on page 55, do you
19 see where you say that "Winningstad teaches away from
20 post-production editing"?

21 A. Yeah.

22 Q. And then towards the bottom of page 55, you
23 say, "Winningstad teaches away from post-production
24 editing solutions and discloses a system which includes
25 mechanisms to prevent the editing of recorded data."

1 And then you cite Winningstad at column 2, 31 to 32.

2 Do you see that?

3 A. Right.

4 Q. All right. And then a little bit further up,
5 you refer to Winningstad using this internal password in
6 order to be able to modify the clock and provide data
7 and time.

8 Do you see that?

9 A. Yes.

10 Q. Okay. So let's look at that passage in
11 Winningstad. So that was column 8.

12 All right. So looking here at column 8, line 12
13 you see this passage in Winningstad:

14 "To ensure that the time and date
15 encoder 88 in the DD device 26 is not
16 tampered with, an internal password may
17 be required to be entered via interface
18 98 in order to modify the clock settings
19 provided by data and time encoder 88."

20 Do you see that?

21 A. I do.

22 Q. Okay. And that's the passage that you were
23 citing in your declaration, correct?

24 A. Right.

25 Q. Okay. But you would acknowledge that even

1 this passage doesn't mandate the use of passwords. It
2 just says "may be required," right? So it's -- it's not
3 a mandatory feature of Winningstad to have these
4 internal passwords?

5 A. Okay.

6 MS. CHIPPERSON: Objection.

7 BY MR. PLIES:

8 Q. Do you agree with that?

9 MS. CHIPPERSON: Same objection.

10 THE WITNESS: I do. Sorry, Rita.

11 I do, but I think the operative point is about
12 tampering. In the context of Winningham [sic], which is
13 to make a recording of, say, a police stop, which may be
14 offered in evidence in a court of law, you know, chain
15 of custody issues, you can see that that would be very
16 important. You don't want it to be tampered with.

17 BY MR. PLIES:

18 Q. Okay. But let's assume that Winningstad is
19 implemented using a password, wouldn't the recorder,
20 then, just be able to enter the password and have access
21 to the recording unit settings and data?

22 MS. CHIPPERSON: Objection.

23 THE WITNESS: I don't know.

24 BY MR. PLIES:

25 Q. Well, presumably the user in Winningstad, the

1 law enforcement, would have the password to their own
2 equipment, right?

3 MS. CHIPPERSON: Objection. Calls for
4 speculation.

5 THE WITNESS: Again -- yeah, how would I know.
6 That's a policy of a particular police department or
7 legal authority, right?

8 BY MR. PLIES:

9 Q. Do you think a POSA would read Winningstad and
10 infer that law enforcement operating the device would
11 have access to the device's settings and data via
12 password?

13 MS. CHIPPERSON: Objection. Calls for
14 speculation.

15 THE WITNESS: What I can say is when I read
16 that, it made perfect sense to me in the context of
17 Winningham. Again, you want to ensure the chain of
18 custody of evidence. So you would pass -- you would
19 encrypt it or password protect it or any number of ways
20 to make sure that you can ascertain and assert in a
21 court of law that the material had not been tampered
22 with.

23 BY MR. PLIES:

24 Q. But someone has the password, correct?

25 MS. CHIPPERSON: Objection. Calls for

1 speculation.

2 THE WITNESS: I have no idea.

3 BY MR. PLIES:

4 Q. So a POSA, in your view, would have no idea
5 whether anybody would have a password to get the data
6 off the device?

7 MS. CHIPPERSON: Objection. Calls for
8 speculation. Asked and answered.

9 THE WITNESS: I think it's -- again, as a POSA
10 myself, you know, I look at what are the requirements of
11 the device that we are going to design and build. And I
12 can see in Winningham what that requirement is to
13 protect the sanctity of the record. So I can understand
14 that.

15 In the context of the Zaxcom patents, there may be
16 reasons to encrypt or put a password. But it's not --
17 it probably is not in the -- you know, in general it's
18 not going to be part of the specification.

19 BY MR. PLIES:

20 Q. In your declaration, do you recall discussing
21 the problem of dropouts when using wireless microphones?

22 A. Discussing with whom? Within my declaration?

23 Q. Yes.

24 A. Yes, I do talk about that.

25 Q. And just for the record, just to -- explain

1 what you mean.

2 Like, what is the issue with dropouts in the
3 context of wireless microphone?

4 A. Well, there are many issues. There could be a
5 distance problem. In other words, you're too far away
6 and the receiver does not have enough signal strength.
7 So it's a signal-to-noise problem. More likely, it
8 could be a problem of interference. Someone's operating
9 on that channel or in that frequency domain that you're
10 trying to use, and therefore it would cause a dropout.

11 It could be due to something called multipath where
12 the signal reflects off another surface. So two
13 versions of the signal arrive at the antenna, and
14 they're out of time with each other. So there'll be a
15 problem of -- a problem of either being additive, in
16 which case it could overload the receiver, or
17 subtractive, in which case the signal level is too low
18 to be received. And it could be someone accidentally
19 unplugged something and they lost -- you know, that's a
20 severe dropout.

21 Q. Now, is it your position that one of the
22 advantages of the invention is that the wireless
23 transmitter both transmits the audio to a remote
24 recorder and also makes a recording of the audio itself?

25 MS. CHIPPERSON: Objection.

1 THE WITNESS: You're referring to the 443 and
2 the 207 inventions?

3 BY MR. PLIES:

4 Q. Yes.

5 A. Yes, that is an advantage.

6 Q. Now, assuming that you have a wireless
7 transmitter that has the onboard local recording
8 function and a dropout occurs during audio transmission,
9 what options post recording would a sound engineer have
10 to obtain a complete recording of the performance?

11 A. Are we talking in the context of inventions,
12 the 443 and 207? Or are we talking in general? Or are
13 we talking without those inventions?

14 Q. Let's just talk in general.

15 So I have a wireless transmitter that has local
16 recording capability. Also can transmit the audio. And
17 if there happens to be a dropout in the transmission,
18 you know, what options does a sound engineer later have
19 to obtain a complete recording of the performance?

20 MS. CHIPPERSON: Objection.

21 THE WITNESS: Prior to the Zaxcom inventions,
22 the choice would have been, if there was a device that
23 recorded locally and recorded -- and recorded remotely
24 over a wireless link, they would presumably have a
25 record of that performance, but there would not be any

1 time or frequency synchronization. So therefore the
2 audio operator would have to take the whole of the
3 recording and replace the defective recording, or, if
4 that were not possible, would have to do a very kind
5 of -- we call it scrubbing. They would have to scrub
6 back and forth, find the portion that they need to
7 replace, and then try to edit or blend it in, which is a
8 time consuming, laborious, and imperfect process.

9 BY MR. PLIES:

10 Q. Okay. So let's change it slightly. Let's
11 assume that the local transmitter and the remote
12 recorder do have timecode capability. So they're more
13 along the lines of the claimed invention. And so you
14 have a wireless mic, it's making a local audio
15 recording, and it's transmitting the audio to a remote
16 recorder. And this is all timecode synchronized. And
17 there's a dropout.

18 So now in that situation, what options does the
19 sound engineer have to obtain a complete recording of
20 the performance, notwithstanding the dropout?

21 MS. CHIPPERSON: Objection.

22 THE WITNESS: In this scenario we're not --
23 you're not -- there's a timecode, but it's not
24 necessarily in constant lock with the master timecodes.
25 There's no notion of that. It's just the local

1 recording has timecode and the remote recording has
2 timecode.

3 BY MR. PLIES:

4 Q. Well, we can assume for this that the local
5 and the remote have synchronized timecode so that the
6 local recording being made by the transmitter is using
7 the same timecode as the remote recorder that's
8 receiving the transmitted audio, and then there's a
9 dropout.

10 So what can the sound engineer do now that there's
11 a dropout in the remote recording?

12 MS. CHIPPERSON: Objection. Form. Vague.

13 THE WITNESS: So in this scenario, though,
14 you're saying that the timecode from the remote recorder
15 or from the local -- or the remote -- the local
16 recorder, that that's the same timecode, somehow that
17 timecode is transmitted or is there a cable connecting
18 the two so that timecode is the same?

19 BY MR. PLIES:

20 Q. Yeah. So, again, let's assume that this is
21 more along the lines of, like, Claim 1 of the 443 patent
22 where I have a master timecode that's feeding everybody
23 the same timecode so there's no issue with
24 synchronization, right. And I've got the local
25 recording of the transmitter, and then I've got the

1 remote recording based upon the transmitted audio.
2 Everybody using the same timecode. But there's a
3 dropout.

4 And so the sound engineer -- what options does he
5 have to get a complete recording in the face of that
6 dropout?

7 MS. CHIPPERSON: Objection to form. Vague and
8 calls for speculation.

9 THE WITNESS: All right. Sorry. I need to
10 clarify one more thing.

11 When you say it's similar to 443, Claim 1 of 443,
12 are you also assuming that that master timecode is jam
13 syncing the local timecode generator?

14 BY MR. PLIES:

15 Q. Let's assume that it's -- it's more like the
16 hard jam so that there's no issue of drift or anything.
17 The timecodes are perfectly applied to the remote
18 recording and the local transmitter.

19 MS. CHIPPERSON: Objection to form. Vague.
20 Hypothetical. Calls for speculation.

21 THE WITNESS: Okay. The example you've given
22 me is the precise implementation -- or it's an
23 implementation of the 443 and the 207 patents.

24 So the option for the sound engineer is they could
25 just ask for those samples to be retransmitted because

1 they know exactly what samples they are. They're time
2 aligned, they're phase aligned, and they use the
3 timecode as the way to find that sample and resend them.
4 So it's very efficient.

5 And, for instance, if they discover it later in
6 post, they can take the recorded file from the local
7 recorder and they can, then, search for that particular
8 sample and then transfer it in and repair the master
9 recording. So it's much more efficient and accurate --

10 If I may expand on that. If you don't have that
11 hard jam sync, then the clocks are going to drift no
12 matter what. And, therefore, you get into a phasing
13 problem when you try to move those samples across.
14 They're not on a common clock at that point. So you get
15 some distortions in the audio. So typically what they
16 would have to do is they would have to rerecord what was
17 recorded locally to make sure that everyone -- that all
18 the audio samples were aligned on the same clock. It's
19 basically a resampling problem. A little more
20 complicated. It takes a little more time. So ...

21 MS. CHIPPERSON: Jeff, if I can just interrupt
22 for a second. We're just about three hours now.

23 Do you have just an approximation about how far you
24 are through your questions or how long we might go? I'm
25 trying to think of it, you know, lunch versus breaks.

1 MR. PLIES: I've just got a couple more. So
2 we'll be done.

3 MS. CHIPPERSON: Oh. Okay. Could we break
4 for five to ten just for a bathroom break?

5 MR. PLIES: Yeah. Sure. I'll see you guys in
6 ten.

7 MS. CHIPPERSON: Okay. Thank you.

8 (A break was taken.)

9 MR. PLIES: I have nothing further.

10 MS. CHIPPERSON: Sorry. I didn't realize we
11 were literally at the end. So that's fine. I have no
12 redirect.

13 MR. PLIES: I guess we're done. Thank you,
14 Mr. DeFilippis. I appreciate your time.

15 MS. CHIPPERSON: Thank you.

16 THE WITNESS: Thank you.

17 THE REPORTER: Rita, Jeff ordered a rough
18 draft. Would you like that too?

19 MS. CHIPPERSON: Yes.

20 (Discussion off the record.)

21 THE REPORTER: Jeff, you want the final
22 transcript on the 25th?

23 MR. PLIES: Yeah. Please.

24 THE REPORTER: How about you, Rita? Would you
25 like the same thing?

1 MS. CHIPPERSON: Regular turnaround's fine.

2 (Deposition concluded at 11:12 a.m.)

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ERRATA SHEET FOR THE TRANSCRIPT OF:

Case Name: Rode Microphones, et al. vs. Zaxcom

Deposition Date: November 14, 2025

Deponent: James DeFilippis

Reason Codes:

1. To clarify the record.

2. To conform to the facts.

3. To correct transcription errors.

Pg.	Ln.	Now Reads	Should Read	Reason
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JAMES DeFILIPPIS

SUBSCRIBED AND SWORN BEFORE ME

THIS _____ DAY OF _____, 20____.

DECLARATION

I, JAMES DeFILIPPIS, declare I have read the foregoing deposition and declare under penalty of perjury under the laws of the State of California:

That the foregoing is my deposition under oath;

That I have read same and have made the necessary corrections, additions, or changes to my answers that I deem necessary;

That my answers as indicated are true and correct.

Executed at _____, California,
this _____ day of _____, 2025.

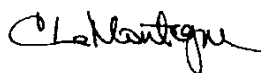
JAMES DeFILIPPIS

REPORTER'S CERTIFICATE

I, Carrie LaMontagne, Certified Shorthand Reporter within and for the State of California, License No. 13393, do hereby certify that the deponent was by me first duly sworn and the foregoing testimony of James DeFilippis was stenographically reported by me on November 14, 2025, and was thereafter transcribed with computer-aided transcription; that the foregoing is a full, complete, and true record of said proceedings.

I further certify that I am not of counsel or attorney for either or any of the parties in the foregoing proceedings and caption named or in any way interested in the outcome of the cause in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 24th day of November, 2025.



CARRIE LaMONTAGNE, CSR 13393