

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

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APPLE, INC.,

Petitioner,

vs.

PERSONALIZED MEDIA COMMUNICATIONS, LLC,

Patent Owner.  
-----

Case No. IPR2016-01520

Patent No. 8,559,635  
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Videotaped Deposition of

Alfred C. Weaver, Ph.D.

Washington, D.C.

Wednesday, July 26, 2017

10:11 a.m.

Reported by:

Laurie Bangart Donovan, RPR, CRR

Job No. 19233

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Page 2

1 Videotaped Deposition of  
 2 ALFRED C. WEAVER, Ph.D.  
 3  
 4 Held at the offices of:  
 5 Kirkland & Ellis, LLP  
 6 655 15th Street, NW  
 7 Suite 1200  
 8 Washington, D.C. 20005  
 9 (202)879-5233  
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 17 Taken pursuant to notice, before  
 18 Laurie Bangart Donovan, Registered  
 19 Professional Reporter, Certified Realtime  
 20 Reporter, and Notary public in and for the  
 21 District of Columbia.  
 22  
 23  
 24  
 25

Page 3

1 APPEARANCES  
 2 ON BEHALF OF THE PATENT OWNER, PERSONALIZED MEDIA  
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 17 ALSO PRESENT:  
 18 David Campbell, Videographer  
 19  
 20  
 21  
 22  
 23  
 24  
 25

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 11 EXHIBITS  
 12 (None marked)  
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1 PROCEEDINGS  
 2 THE VIDEOGRAPHER: This is media  
 3 number 1 of the videotaped deposition of  
 4 Dr. Alfred Weaver in the matter of Apple,  
 5 Inc. versus Personalized Media  
 6 Communications, LLC, in the United States  
 7 Patent & Trademark Office before the Patent  
 8 Trial and Appeal Board, number IPR  
 9 2016-01520.  
 10 This deposition is being held at  
 11 Kirkland & Ellis, 655 15th Street, Northwest,  
 12 Suite 1200, Washington, D.C., 20005, on  
 13 July 26, 2017, at approximately 10:11 a.m.  
 14 My name is David Campbell, and I am  
 15 the legal video specialist. The court  
 16 reporter is Laurie Donovan. Both of us are  
 17 in association with TransPerfect.  
 18 Counsel, will you please identify  
 19 yourself for the record, and the witness will  
 20 be sworn in.  
 21 MR. SERNEL: My name is Marc Sernel  
 22 with the law firm of Kirkland & Ellis, and I  
 23 represent Apple.  
 24 MR. SCHREINER: My name is Stephen  
 25 Schreiner, and I'm with the law firm of

1 Goodwin Procter, and I represent Personalized  
 2 Media Communications, LLC.  
 3 ALFRED C. WEAVER, Ph.D.,  
 4 having been first duly sworn, testified  
 5 upon his oath as follows:  
 6 EXAMINATION BY COUNSEL FOR APPLE  
 7 BY MR. SERNEL:  
 8 Q Good morning, sir.  
 9 A Good morning.  
 10 Q Could we get your full name for the  
 11 record again?  
 12 A Sure. Alfred Charles Weaver.  
 13 Q What is your current home address?  
 14 A My home address is 1400 Ballard Woods  
 15 Court, Charlottesville, Virginia, 22901.  
 16 Q Now, I know you've been deposed several  
 17 times before, and we've had the pleasure of being  
 18 together for a deposition in the past. I want to  
 19 go over a few of the sort of ground rules that  
 20 will govern our deposition here today.  
 21 It's important that you understand each  
 22 of my questions and every part of the question.  
 23 If for some reason you don't understand a question  
 24 or a part of a question, you need to tell me that  
 25 so that I can clarify the question for you. So.

1 A No.  
 2 Q Okay. So I referenced the fact that  
 3 you've given prior depositions with respect to  
 4 issues for PMC patents, including in matters  
 5 involving Apple, correct?  
 6 A That's correct.  
 7 Q Do you recall off the top of your head  
 8 how many depositions you've had with regard to  
 9 your opinions regarding PMC patents?  
 10 A No.  
 11 Q Rough guess of five?  
 12 A Four.  
 13 Q Four?  
 14 A But it's a guess.  
 15 Q Okay. In any of your prior depositions,  
 16 do you -- strike that.  
 17 Sitting here today, do you recall any  
 18 testimony you've provided regarding PMC patents in  
 19 the past that you now believe to have been  
 20 inaccurate in any way?  
 21 A No, I, I don't recall.  
 22 Q Same question for any expert reports or  
 23 declarations that you've submitted in prior  
 24 proceedings regarding PMC's patents: Anything,  
 25 sitting here today, that you would recall as being

1 Will you agree to tell me if you don't  
 2 understand a question or part of a question?  
 3 A I will agree.  
 4 Q It's also important that you hear each  
 5 of my questions and every part of a question. If  
 6 for some reason you don't hear a question or you  
 7 think you've missed part of a question, you need  
 8 to tell me that so that I can reask the question  
 9 to you.  
 10 So will you agree to tell me if you  
 11 don't hear a question or a part of a question?  
 12 A I do.  
 13 Q It's also important that we don't talk  
 14 over one another, in part for the court reporter's  
 15 ability to take down everything that's said, but  
 16 also I don't want to cut you or prevent you from  
 17 finishing an answer. I want full complete answers  
 18 to my questions. So if I ever cut you off or  
 19 prevent you from finishing an answer, you need to  
 20 tell me that.  
 21 So will you agree to do that?  
 22 A I will.  
 23 Q Is there any medication or illness that  
 24 would prevent from you testifying truthfully and  
 25 accurately today?

1 inaccurate that you've provided at a prior  
 2 declaration or expert report?  
 3 A Nothing that I recall.  
 4 Q Okay. Now, you understand today the  
 5 focus of our discussion is going to be on the  
 6 PMC's '635 patent.  
 7 Do you have that understanding?  
 8 A I do.  
 9 Q And do you understand that PMC is  
 10 alleging that the '635 patent has a priority date  
 11 dating back to a 1981 patent application that was  
 12 filed by PMC, correct?  
 13 A That is my understanding.  
 14 Q Okay, and so I'm going to ask you some  
 15 questions about kind of what a person of skill in  
 16 the art knew in the 1981 time frame.  
 17 Is that okay?  
 18 A Sure.  
 19 Q Now, did you consider yourself a person  
 20 of skill in the art of the technology of the '635  
 21 patent in 1981?  
 22 A Yes.  
 23 Q And what do you consider to be the  
 24 technology of the, of the '635 patent?  
 25 A I have a description of that in my

1 report. Why don't I just --  
 2 Q And just so we'll -- and I, I understand  
 3 and we can note for the record, in front of you  
 4 you have a marked-up copy of your declaration,  
 5 which I believe is PMC Exhibit 2023, that it  
 6 contains some, some of your notes; is that  
 7 correct?  
 8 A That's right.  
 9 Q Okay. I'm also going to hand you a  
 10 clean copy of PMC Exhibit 2023. I may -- I'm  
 11 going to refer to that, but certainly if you need  
 12 to refer to your notes, you can go ahead and do  
 13 so, so I'll hand you that.  
 14 A Okay.  
 15 Q So you've said that you -- you  
 16 referenced, I believe, Exhibit 2023, your  
 17 declaration, as describing the general technology  
 18 of the '635 patent?  
 19 A Yes. I do that in section 5.  
 20 Q Okay, and I'm looking now. Is that  
 21 starting at paragraph 37 of Exhibit 2023?  
 22 A That is correct.  
 23 Q If we look at paragraph 38, next page,  
 24 which is page 21 of Exhibit 2023, you talk about  
 25 the '635 patent "describes a novel

1 the subscriber station, or it's also called an  
 2 "end-user station."  
 3 Q In that sentence I just read, it refers  
 4 to an "analog or digital information transmission  
 5 system."  
 6 Do you see that?  
 7 A I do.  
 8 Q What would be a digital information  
 9 transmission system?  
 10 A Digital information can be transmitted  
 11 over analog or digital transmission media, so I  
 12 give some examples later on of, of how that's  
 13 accomplished.  
 14 Q And can you provide one example for me?  
 15 A Sure. So analog information could be  
 16 transmitted -- sorry. You asked about digital  
 17 information.  
 18 Q Yep.  
 19 A Digital information could be transmitted  
 20 over an analog medium, and just as one example, by  
 21 modulating a carrier wave, digital information can  
 22 be transmitted over digital media. An example --  
 23 one example would be laser technology or telephone  
 24 technology, and there are others that are  
 25 specifically described later on.

1 signal-processing system having multiple layers of  
 2 transmitter station devices that are able to  
 3 control addressable receiver devices in large  
 4 networks."  
 5 Do you see that?  
 6 A I do. That's the first sentence.  
 7 Q Okay, and then the next sentence says,  
 8 "For example, the '635 patent specification  
 9 discloses, among other things, an end-to-end  
 10 networked system that can distribute digital  
 11 information over an analog or digital information  
 12 transmission system from transmitter stations to  
 13 receiver stations."  
 14 Do you see that?  
 15 A I do.  
 16 Q And then you say that a receiver station  
 17 is sometimes interchangeably referred to in your  
 18 declaration as a "subscriber station," correct?  
 19 A Correct.  
 20 Q So essentially receiver stations and  
 21 subscriber stations are referring to the same  
 22 thing?  
 23 A The -- there are, there are also -- just  
 24 to be clear, there are also intermediate receiver  
 25 stations, but an example of a receiver station is

1 Q So you said "laser technology." What,  
 2 what are you referring to?  
 3 A So one of the examples in the '635 is a  
 4 laserdisc communication system which can both  
 5 record and play, and so the information stored on  
 6 a laserdisc system in the embodiments in the '635  
 7 is digital information, and so it's a digital path  
 8 in between the videodisc player and, and an  
 9 intermediate transmitter station or receiver  
 10 station.  
 11 Q Okay. So in your opinion, the laserdisc  
 12 communication system that's mentioned in the '635  
 13 patent would be a digital information transmission  
 14 system?  
 15 A Yes, that's right.  
 16 Q You also mentioned telephone. Is that  
 17 another example of a digital information  
 18 transmission system?  
 19 MR. SCHREINER: Objection. Form.  
 20 THE WITNESS: Yes. It's one  
 21 example.  
 22 BY MR. SERNEL:  
 23 Q And just so I understand, in the  
 24 sentence you say that digital information can be  
 25 transmitted either over an analog information

1 transmission system or a digital information  
 2 transmission system, correct?  
 3 A That's correct.  
 4 Q So the transmission system is not  
 5 defined by what it's necessarily carrying. A  
 6 digital information transmission system can carry  
 7 analog information, it can carry digital  
 8 information, or it can carry some of both; is that  
 9 fair?

10 MR. SCHREINER: Object to the form.  
 11 Vague and ambiguous.

12 THE WITNESS: An analog medium can  
 13 carry analog information, or, if that analog  
 14 information has been digitized, can carry  
 15 digital information. Digital media can carry  
 16 digital information, or if, if analog  
 17 information has been digitized, it can carry  
 18 digital information.

19 BY MR. SERNEL:  
 20 Q Now, in 1981, transmission of television  
 21 signals would have been pursuant to an analog  
 22 information transmission system, correct?

23 MR. SCHREINER: Object to the form.  
 24 Foundation.

25 THE WITNESS: That is one example.

1 BY MR. SERNEL:  
 2 Q Would you agree that in 1981, the  
 3 conventional way of transmitting television  
 4 signals would have been pursuant to an analog  
 5 information transmission system, correct?

6 A In the, in the particular example of  
 7 NTSC, broadcast television, that would be true.  
 8 However, digital television was known and could be  
 9 transmitted over either analog or digital  
 10 carrier media.

11 Q You said "NTSC." What is that?

12 A That was the broadcast standard in  
 13 America for broadcast TV.

14 Q In 1981?

15 A In 1981.

16 Q And any television signal that was  
 17 transmitted consistent with the NTSC standard in  
 18 1981 would have contained analog information and  
 19 would have been an analog information  
 20 transmission, correct?

21 MR. SCHREINER: Objection. Form.  
 22 Compound.

23 THE WITNESS: NTSC allows for the  
 24 transmission of either analog or digital  
 25 information over an analog medium.

1 BY MR. SERNEL:  
 2 Q Any television signal that was  
 3 transmitted consistent with the NTSC standard in  
 4 1981 would have been an analog information  
 5 transmission, correct?

6 MR. SCHREINER: Objection. Form.

7 THE WITNESS: If, if, as you say,  
 8 we restrict the conversation to NTSC-  
 9 compliant broadcast transmissions, then yes,  
 10 that's true. That is an analog transmission  
 11 standard.

12 BY MR. KLINE:  
 13 Q And to comply with the NTSC standard in  
 14 1981, the transmission would have to include  
 15 things like analog synchronization signals,  
 16 correct?

17 A NTSC does require some analog  
 18 synchronization signals as part of the standard.

19 Q Now, you understand that some of the  
 20 claims in the '635 patent that we're talking about  
 21 here today include a limitation that requires a  
 22 digital information transmission unaccompanied by  
 23 any non-digital information transmission, correct?

24 A Yes. Four of the claims do have that  
 25 limitation.

1 Q You would agree that any transmission  
 2 conducted pursuant to the NTSC standard would not  
 3 meet that requirement of the '635 patent claims  
 4 that the transmission would be unaccompanied by  
 5 any non-digital information transmission, correct?

6 A No.

7 Q You disagree with my statement?

8 A I disagree with your statement.

9 Q And can you explain that disagreement?

10 A Mm-hmm, because the information that is  
 11 carried over NTSC is allowed to be digital.

12 Q Right, but we already agreed that any  
 13 communication transmitted pursuant to the NTSC  
 14 standard in 1981 would have contained analog  
 15 synchronization signals, correct?

16 A The analog synchronization signals are  
 17 not part of the information. They're part of the  
 18 media, the delivery system.

19 Q Dr. Weaver, you recall submitting a  
 20 prior declaration in an earlier IPR proceeding  
 21 where you've taken a position that the presence of  
 22 analog synchronization signals in a transmission  
 23 means that that transmission contains non-digital  
 24 information, correct?

25 A I'm -- I don't recall that specifically.

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