#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPROVAL BOARD

- - - - - - - - X

APPLE, INCORPORATED,

Petitioner, :

v. : CASE No's. IPR2016-00754

PERSONALIZED MEDIA : And IPR2016-00755

COMMUNICATIONS, LLC, :

Patent owner. :

- - - - - - - - X

Videotaped Deposition of ALFRED WEAVER, PH.D.

Washington, D.C.

Friday, February 24, 2017

9:02 a.m.

Reported by: Cassandra E. Ellis, RPR

Job No.: 18149



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1	Deposition of ALFRED WEAVER, PH.D., held at	1 CONTENTS
2	the offices of Kirkland & Ellis LLP, 655 15th Street	2 EXAMINATION OF ALFRED WEAVER, PH.D. PAGE
3	Northwest, Suite 1200, Washington, D.C. 20005,	3 By Mr. Sernel 7
4	pursuant to agreement, before Cassandra E. Ellis,	4 By Ms. Albert 177
5	Certified Court Reporter - WA, Certified Shorthand	5
6	Reporter - HI, Registered Professional Reporter,	6
7	Certified Livenote Reporter, Realtime Systems	EXHIBITS
8	Administrator and Notary Public of The District of	8 (Attached to the Transcript)
9	Columbia.	9 ALFRED WEAVER, PH.D. Deposition Exhibit PAGE
10	Columbia.	10 Previously Marked
11		11 Apple Exhibit-1003-1 US Patent No. 8,191,091 20
12		PP
13		PP .
14		PP
15		14 Apple Exhibit-1005 US Patent No. 4,736,422 162
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17		16 Apple Exhibit-1008 US Patent No. 4,388,643 143
18		17 Apple Exhibit 1021 VIDEOTEX the new 107
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20		19 Apple Exhibit 1022 New Ancillary Services 101
21		Using a Television Channel By Bernard Marti
22		Paper No 14 Decision Institution of Inter
22		22 Partes Review 37 C.F.R. § 42.108
	Page 3	Page 5
1	APPEARANCES	1 EXHIBITS CONTINUED
2	ON BEHALF OF PETITIONER APPLE:	2 (Attached to the Transcript)
3	MARC SERNEL, ESQUIRE	3 ALFRED WEAVER, PH.D. Deposition Exhibit PAGE
		THE RED WELLVER, THE DEPOSITION EXHIBIT
4	KIRKLAND & ELLIS LLP	4 Previously Marked
4 5	KIRKLAND & ELLIS LLP 601 Lexington Avenue	_
		4 Previously Marked
5	601 Lexington Avenue	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94
5 6	601 Lexington Avenue New York, New York 10022	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68
5 6 7	601 Lexington Avenue New York, New York 10022 (212) 446-4663	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11
5 6 7 8	601 Lexington Avenue New York, New York 10022 (212) 446-4663	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's
5 6 7 8 9	601 Lexington Avenue New York, New York 10022 (212) 446-4663 marc.sernel@kirkland.com	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's 9 Response
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5 6 7 8 9 10 11 12 13 14	601 Lexington Avenue New York, New York 10022 (212) 446-4663 marc.sernel@kirkland.com  ON BEHALF OF PATENT OWNER PMC: JENNIFER ALBERT, ESQUIRE CHARLES COX, ESQUIRE GOODWIN PROCTER LLP 901 New York Avenue, Northwest	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's 9 Response 10 11 12 13 14
5 6 7 8 9 10 11 12 13 14 15	601 Lexington Avenue New York, New York 10022 (212) 446-4663 marc.sernel@kirkland.com  ON BEHALF OF PATENT OWNER PMC: JENNIFER ALBERT, ESQUIRE CHARLES COX, ESQUIRE GOODWIN PROCTER LLP 901 New York Avenue, Northwest Washington, D.C. 20001	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's 9 Response 10 11 12 13 14 15
5 6 7 8 9 10 11 12 13 14 15 16	601 Lexington Avenue New York, New York 10022 (212) 446-4663 marc.sernel@kirkland.com  ON BEHALF OF PATENT OWNER PMC: JENNIFER ALBERT, ESQUIRE CHARLES COX, ESQUIRE GOODWIN PROCTER LLP 901 New York Avenue, Northwest Washington, D.C. 20001 (202) 346-4059	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's 9 Response 10 11 12 13 14 15 16
5 6 7 8 9 10 11 12 13 14 15 16 17	601 Lexington Avenue New York, New York 10022 (212) 446-4663 marc.sernel@kirkland.com  ON BEHALF OF PATENT OWNER PMC: JENNIFER ALBERT, ESQUIRE CHARLES COX, ESQUIRE GOODWIN PROCTER LLP 901 New York Avenue, Northwest Washington, D.C. 20001 (202) 346-4059 Jalbert@goodwinlaw.com	4 Previously Marked 5 PMC Exhibit 2019 Declaration of Alfred Weaver, 94 6 PH.D. Pursuant to 37 C.F.R. § 1.68 7 PMC Exhibit 2022 Declaration of Alfred C. 11 8 Weaver, PH.D., In Support of Patent Owner's 9 Response 10 11 12 13 14 15 16 17
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	Page 6		Page 8
1	PROCEEDINGS	1	Q Just to get a a clean
2	THE VIDEOGRAPHER: Good	2	record, can you please state your full
3	morning. This is the beginning of	3	name for the record?
4	disc number one in the deposition	4	A Alfred Charles Weaver.
5	of Dr. Alfred Weaver, taken in the	5	Q And I don't know if its changed
6	matter of Apple, Incorporated	6	since we last spoke, but could you state
7	versus Personalized Media	7	your current home address?
8	Communications, LLC, with a Case	8	A That's 1400 Ballard Woods
9	Numbers IPR2016-00754 and	9	Court, Charlottesville, Virginia 22901.
10	IPR2016-00755 5, held in the	10	Q And who is your current
11	United States Patent and Trademark	11	employer?
12	Office Before the Patent and Trial	12	A That's the University of
13	and Appeal Board.	13	Virginia.
14	Today's date is February	14	Q Now, I usually ask a question
15	24th, 2017, and the time on the	15	about whether you've been deposed before,
16	monitor is 9:02 a.m. My name	16	and how many times, but I think I know
17	my name is Joseph Ellis, I am the	17	the answers to those questions. So given
18	certified legal videographer, the	18	that you've been deposed before, I just
19	court reporter is Cassandra Ellis,	19	want to remind you of sort of the rules
20	and we are here with Transperfect	20	that I expect will govern our proceeding
21	Legal Solutions.	21	today.
22	If counsel would please	22	First of all, its important
	ii oodiiga wadaa picasa		i list of all, its important
	Page 7		Page 9
1	introduce yourselves, and whom you	1	that you understand each of my question,
2	represent, after which the court	2	if for some reason you don't understand a
3	reporter will swear in the	3	question or part of a question you need
4	witness, and then you may proceed.	4	to tell me that so that I can clarify the
5	MR. SERNEL: My name is Marc	5	question so that you can and do
6	Sernel, I'm with the law firm of	6	understand it, will you agree to tell me
7	Kirkland and Ellis, and I	7	if you don't understand a question or
8	represent the petitioner, Apple,	8	part of a question?
9	Incorporated.	9	A Yes, I will.
10	MS. ALBERT: Jennifer	10	Q It's also important that you
11	Albert, for the patent owner,	11	hear each of my questions and every part
12	Personalized Media Communications,	12	of a question. If for some reason you
13	and with me today is my colleague,	13	don't think you've heard a question or
14	Charles Cox. I also I'm sorry,	14	part of a question you need to tell me
15	I also represent the witness	15	that so that I can repeat the question so
16	today.	16	that you do hear it fully.
17	ALFRED WEAVER	17	Will you agree to tell me if
18	having been sworn, testified as follows:	18	you don't hear a question or part of a
19	EXAMINATION	19	question?
20	BY MR. SERNEL:	20	A Yes, I will.
21		21	Q It's also important that we get
22		22	a complete record and I get your complete
<u> </u>	A Good morning, Mr. Sernel.		a complete record and r get your complete

3 (Pages 6 to 9)



	Page 10		Page 12
1	answers. I don't want to cut off any of	1	Exhibit 2022 from the 755 IPR proceeding
2	your answers. I want to allow you to	2	a declaration that you prepared and
3	finish your answers. And so if I ever	3	executed and signed on December 16th,
4	cut off or prevent you from finishing an	4	2016?
5	answer you need to tell me that so that I	5	A Yes, it is.
6	can allow you to finish an answer and	6	Q And is it correct this contains
7	give me a complete answer.	7	all the opinions that you had with
8	So will you agree to tell me if	8	respect to the challenged claims of the
9	I ever cut off or prevent you from	9	`091 patent as of December 16, 2016?
10	finishing an answer?	10	MS. ALBERT: Object to the
11	A Yes, I will.	11	form.
12	Q Is there any medication or	12	A There were there was a
13	illness that would prevent you from	13	previous declaration, that contained my
14	testifying truthfully and accurately here	14	÷
15	today?	15	opinions, and this is the most recent
16	A No.	16	version of declaration in support of the
17	Q So, you have an understanding,	17	patent owner.
18	sir, that we are here today in a	1	Q And given that it's the most
19	deposition regarding declarations that	18	recent declaration in support of the
20	you have prepared and submitted for two	19	patent owner for the `091 patent is it
21	IPR proceedings; is that your	20	fair that I conclude that this contains
22	understanding?	21	your most recent opinions regarding the
22	understanding?	22	`091 challenged claims?
	Page 11		Page 13
1	A Yes, it is.	1	A Yes.
2	Q And one of the IPR proceedings	2	Q Have you formed any new or
3	is IPR2016-00754, which relates to the	3	different opinions regarding the
4	`635 patent; is that correct?	4	challenged claims of the `091 patent that
5	A That's correct.	5	are not contained in Exhibit 2022?
6	Q And then the other one is	6	A No. My opinions are are
7	IPR2016-00755, for the `091 patent;	7	contained in this document.
8	correct?	8	Q Okay. If you could turn to
9	A Correct.	9	page two, actually, sorry, page six,
10	(Previously marked Exhibit	10	we're going to use the pagination in the
11	No. 2022 was identified for the	11	bottom right, so it's page six of Exhibit
12	record.)	12	2022 in the 755 IPR proceeding. I'm
13	BY MR. SERNEL:	13	looking at paragraph five, at the top of
14	Q Okay. So let's just dive right	14	that page, and you reference being a
15	in here. I'm going to mark as the first	15	principal investigator for something
16	in order or actually, I'm going to	16	called Secure E-Commerce, a Modular
17	show you what is marked PMC Exhibit 2022	17	Course Supported By Virtual Laboratories;
18	in the 755 IPR proceeding relating to the	18	do you see that?
19	`091, which I believe is the declaration	19	•
20	of yourself in support of patent owner's	20	A Yes, I do.
21	* * * * * * * * * * * * * * * * * * * *	21	Q And when did you receive that
22	response.	21	funding?  A The dates are in my CV if
~ ~ ~	So the first question is, is		A The dates are in my CV, if
		<u> </u>	4 (Pages 10 to 13)

4 (Pages 10 to 13)



	Page 14		Page 16
1	if you would hand me that, I would have	1	that was the first one at the University.
2	a look it up and tell you.	2	Q Do you believe you were one of
3	Q I don't know that I have a copy	3	the first people to teach an e-commerce
4	of your CV. Do you have a good estimate	4	course anywhere starting in 1995?
5	as to when you would have done that work?	5	A I would have been one of the
6	A It would have been in the	6	early instructors, because electronic
7	decade of the 2000s.	7	commerce, itself, was new.
8	Q Closer to early 2000 or	8	Q When do you think electronic
9	or or 2000, or is it like a 2010 type	9	commerce became a thing?
10	of thing?	10	MS. ALBERT: Object to the
11	MS. ALBERT: Object to the	11	form.
12	form.	12	A The type of electronic commerce
13	A Well, again, it's it's	13	that that I deal with in my course is
14	it's all clearly laid out in the CV.	14	the buying and selling of products and
15	Just by recollection, middle 2000.	15	services over the internet. And, in
16	Q Okay. And can you describe for	16	particular, we focus on operations that
17	me what work was done pursuant to this	17	are web-enabled. So electronic commerce
18	research project?	18	that is web-enabled is, in the United
19	A Sure. I've been teaching the	19	States, is about a 1993 phenomena.
20	electronic commerce course at the	20	Q Before 1993 there was no such
21	University of Virginia since 1995. And I	21	thing as web-enabled commerce?
22	thought that I might be able to do a good	22	A The by by web-enabled I
22	thought that I might be able to do a good		A The by by web-enabled i
	Page 15		Page 17
1	job of providing information to my	1	mean using a web browser and a web
2	students if they were to have problems	2	server. And by e-commerce I'm talking
3	that they could work on outside of	3	about buying and selling products and
4	lecture time.	4	services. So while commerce had been
5	So I wrote a proposal to the	5	conducted electronically for many years.
6	National Science Foundation proposing	6	I'm talking about the content of my
7	to create a course, it would be a	7	course and my course was predicated on
8	traditional lecture course, but	8	the public availability of web browsers
9	supplemented by virtual laboratories.	9	and servers.
10	And the virtual laboratories were	10	Q And the public availability of
11	programming exercises that entail	11	web browsers and servers is a
12	programmatic operations relevant to	12	approximately 1993 phenomenon?
13	electronic commerce.	13	A That's right, they at least
14	Q Okay. You said you've taught a	14	in at least in the United States. The
15	course at the University of Virginia in	15	public availability of the Netscape
16	e-commerce since 1995?	16	browser, in 1993, marked a an
17	A That's right.	17	important time for e-commerce.
18	Q Was there an e-commerce course	18	Q Got it. If you could turn to
19	at the University of Virginia, prior to	19	page nine of Exhibit 2022, in the 755
20	1995, that somebody else taught or was	20	IPR, you list here a series of materials
21	that the first one you're aware of?	21	reviewed and relied upon in a chart there
22	A To the best of my knowledge,	22	in paragraph 16; do you see that?
			5 (Pages 14 to 17)



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