EXHIBIT JJ

1   UNITED STATES DISTRICT COURT

2   NORTHERN DISTRICT OF CALIFORNIA

3   MATTHEW CAMPBELL, MICHAEL

4   HURLEY, and DAVID SHADPOUR,

5   on behalf of themselves and

6   all others similarly situated,

7   Plaintiffs,

8   vs.   No. 4:13-cv-05996-PJH

9   FACEBOOK, INC.,

10   Defendants.

11 _____

12

13   **HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY**

14   **CONTAINS SOURCE CODE**

15

16   VIDEOTAPED 30(b)(6) DEPOSITION OF

17   MICHAEL ADKINS

18   Wednesday, October 28, 2015

19

20

21 Reported by:

22 COREY W. ANDERSON

23 CSR No. 4096

24 Job No. SF 2173701A

25 PAGES 1 - 124

                                        Page 1

1	Q. Okay. And I saw that earlier prior to the	10:46:31
2	deposition and at the beginning of it you were doing	10:46:37
3	something with the computer. What were you doing	10:46:41
4	initially?	10:46:45
5	A. The source code as delivered appeared to	10:46:47
6	be compressed.	10:46:49
7	Q. Uh-huh.	10:46:51
8	A. And when compressed into a single archive	10:46:53
9	you cannot inspect the individual files.	10:46:56
10	So I decompressed it onto the file system	10:47:01
11	of the computer in the event that I would need to	10:47:04
12	access the individual source files for the purposes	10:47:07
13	of the deposition.	10:47:10
14	Q. As part of your preparation for this	10:47:11
15	deposition, did you review the source code that	10:47:31
16	specifically relates to topic 1 (c)?	10:47:35
17	A. I reviewed the source code for ███████	10:47:38
18	██████.	10:47:43
19	Q. Okay. Can you please identify the source	10:47:43
20	code that carries out the processes characterized in	10:47:56
21	section 1 (c)?	10:48:01
22	A. Yes.	10:48:09
23	Q. Please do.	10:48:10
24	A. This is the ████████ source code,	10:48:49
25	and the other files in this directory are associated	10:48:51

Page 45

1   JavaScript enabled, the JavaScript functions monitor   11:04:15

2   the individual key strokes in a manner often used   11:04:24

3   for things such as type ahead search looking for   11:04:29

4   similar patterns as to what ███████ might try to   11:04:35

5   extract, specifically the -- the public Internet   11:04:40

6   standards governing the format of URLs or domain   11:04:45

7   names.   11:04:48

8   That is code which runs entirely on the   11:04:53

9   user's machine, and when it detects such a string,   11:04:54

10   it will make an asynchronous HTTP call to our   11:05:01

11   service to team to generate a preview.   11:05:06

12   And at that time while attempting to   11:05:12

13   generate the preview, we would consult ███████   11:05:13

14   internal on Facebook's server.   11:05:20

15   Q.   I believe you said that the JavaScript   11:05:22

16   uses key strokes to generate things such as type   11:05:27

17   ahead?   11:05:30

18   A.   Yes. So if you are using an online   11:05:33

19   product, and let's say you are writing the name of a   11:05:36

20   person you know or you are typing an e-mail address,   11:05:39

21   the product might have a list of recognizable search   11:05:46

22   terms which it would then offer to fill in for you   11:05:50

23   so you do not have to type the entire name or   11:05:53

24   address.   11:06:01

25   Q.   During the 2010 to 2012 timeframe when   11:06:02

1	A.	This is ██████████████████.	12:06:17
2	Q.	And where is it located?	12:06:22
3	A.	It is in ████████████████	12:06:23
4	██████.		12:06:28
5	Q.	What are the relevant features that ██████	12:06:36
6	has to take into account?		12:06:38
7	██ ████████████████████		12:06:41
8	████████████████████████		12:06:43
9	████████████████████		12:06:48
10	████████████████████		12:06:51
11	██████		12:06:53
12	████████████████		12:06:55
13	████████████████ ██████		12:06:58
14	████████████████		12:07:01
15	██████████████████████		12:07:05
16	██████		12:07:07
17	████████████████████		12:07:11
18	████████████████		12:07:15
19	████████████████		12:07:20
20	██████		12:07:22
21	████████████████		12:07:23
22	██████████████████		12:07:26
23	██████████		12:07:28
24	██████████████		12:07:30
25	██████████████████		12:07:35

Page 75

1	████████████████████████████.	12:07:38
2	████████████████████	12:07:49
3	████████████████████████	12:07:53
4	████████████████████████	12:07:56
5	████████████████████████	12:08:00
6	████████████████████████	12:08:02
7	████████ ████████████████	12:08:06
8	████████████.	12:08:08
9	████ ████████████	12:08:15
10	████████████████.	12:08:20
11	Q. The ████████████████?	12:08:37
12	A. Uh-huh.	12:08:39
13	Q. That's one of the files we were looking	12:08:40
14	at. Where --	12:08:41
15	A. That is this file.	12:08:42
16	Q. That's this file?	12:08:43
17	A. Yes.	12:08:44
18	Q. Where is the ████ call in this?	12:08:44
19	A. ████████████ ████████	12:08:49
20	████████ ████████████████	12:08:55
21	████████████████████████	12:09:02
22	████████████████████████	12:09:05
23	████████████████████	12:09:08
24	████████████████████████	12:09:11
25	████████████████████	12:09:21

1	████████████████████████████	12:09:25
2	███████████████████████████████	12:09:28
3	████████████████████████████	12:09:31
4	██████████.	12:09:34
5	████████████████████████	12:09:35
6	█████████████████████████.	12:09:38
7	Q. So the Facebook abuse- and	12:09:45
8	security-related platform that's referenced in this	12:09:47
9	section?	12:09:52
10	A. Uh-huh.	12:09:53
11	Q. Is███████████?	12:09:53
12	A. I would say that is ██████	12:09:55
13	Q. ███████ Okay. ███████████	12:09:56
14	███████████ ███████████████	12:10:01
15	A. Those would be the ones we previously	12:10:03
16	discussed: █████████████████████, et cetera.	12:10:05
17	Q. Which, what's the name of the ███████████	12:10:45
18	that is called here?	12:10:48
19	A. The name of the ██████ check?	12:10:51
20	Q. Uh-huh.	12:10:53
21	A. It is simply called ████████████.	12:10:54
22	Q. Okay. And what does that function	12:10:56
23	perform?	12:11:00
24	A. █████████████████████████	12:11:01
25	█████████████████████████.	12:11:05

Page 77

1   A.   Uh-huh.   13:44:52

2   Q.   States "Various message statistics,   13:44:54

3 including all three formats for storing URL share   13:44:56

4 data-message-specific information, user-specific   13:45:00

5 share objects, and the global share object, were   13:45:02

6 part of a universe of data available to the site   13:45:05

7 security abuse- and security-related platforms for 13:45:07

8 URL classification and other security efforts."   13:45:10

9   Is that correct?   13:45:13

10   A.   That is correct.   13:45:14

11   Q.   What are the message statistics that are   13:45:21

12 being referred to here?   13:45:24

13   A.   Message statistics for site integrity and 13:45:26

14 abuse- and security-related purposes would refer to 13:45:30

15 things like the number of messages a given user had 13:45:33

16 sent over various periods of time, the number of   13:45:37

17 specific recipients they have sent, the number of   13:45:41

18 messages they sent containing URLs or attachments or 13:45:44

19 other statistics that helped form a profile that   13:45:48

20 identifies abuse vectors.   13:45:51

21   Q.   Where is the source code that carries out 13:46:05

22 this functionality?   13:46:07

23   A.   ██████████████████████████████████   13:46:11

24 ██he   13:46:13

25 ████████████████████████████████████   13:46:16

Page 118

1	███████████████████████	13:46:22
2	██████	13:46:25
3	Q. What sort of statistics would be from the	13:46:32
4	global share object would be available to the	13:46:35
5	integrity and abuse- and security-related platforms?	13:46:38
6	A. The sorts of statistics that -- and I'm	13:46:45
7	not sure that "statistics" is quite the correct	13:46:48
8	word, it's probably just more like data would be	13:46:51
9	available would be things that like the date the URL	13:46:53
10	was first shared on Facebook or perhaps the number	13:46:57
11	of people who have shared it.	13:47:00
12	Q. What format was the user specific share	13:47:30
13	object information stored in?	13:47:33
14	A. I believe it would be stored as a share	13:47:41
15	FBobject.	13:47:43
16	Q. Okay. And where does that share FBobject	13:47:51
17	get stored?	13:47:54
18	A. Facebook objects are typically stored in a	13:47:55
19	MySQL database and in a cache system for quick and	13:48:00
20	easy access.	13:48:06
21	Q. And where are the global share objects	13:48:16
22	stored? I'm sorry, withdrawn.	13:48:18
23	What's the format in which the global	13:48:20
24	share objects are stored?	13:48:22
25	A. They are similar to user specific share	13:48:27

Page 119

1   I, the undersigned, a Certified Shorthand

2   Reporter of the State of California, do hereby
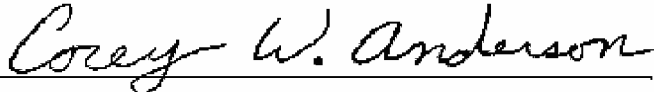
3   certify:

4   That the foregoing proceedings were taken

5   before me at the time and place herein set forth;

6   that any witnesses in the foregoing proceedings,

7   prior to testifying, were administered an oath; that

8   a record of the proceedings was made by me using

9   machine shorthand which was thereafter transcribed

10   under my direction; that the foregoing transcript is

11   a true record of the testimony given.

12   Further, that if the foregoing pertains to

13   the original transcript of a deposition in a Federal

14   Case, before completion of the proceedings, review

15   of the transcript was not requested.

16   I further certify I am neither financially

17   interested in the action nor a relative or employee

18   of any attorney or any party to this action.

19   IN WITNESS WHEREOF, I have this date

20   subscribed my name.

21   Dated: 10/30/2015

22

23   _Corey W. Anderson_

24   COREY W. ANDERSON

25   CSR No. 4096

Errata

Case: *Campbell et al. v. Facebook, Inc.*
Case No. 13-CV-05996-PJH
Date of Deposition: October 28, 2015
Name of Deponent: **Michael Adkins**

Reason codes:
1. To clarify the record.
2. To conform to the facts.
3. To correct transcription errors.

Page	Line	Reads	Should Read	Reason
Global		▮	▮	1
Global		▮	▮	1
Global		▮	▮	1
Global		sigma	Sigma	1
13	12	at – during my time at Facebook.	during my time at Facebook.	1
16	18	some – some time ago, some number of months ago.	some time ago, some number of months ago.	1
16	23	there – that this case existed and that we were on	this case existed and that we were on	1
19	17	If – if I was notified of a case like	If I was notified of a case like	1
20	2	I can't remember precisely or than that I	I can't remember precisely other than that I	3
20	3	was looking for anything specific. Mostly just	wasn't looking for anything specific. Mostly just	3
24	19	I have – I have seen	I have seen	1
34	8	operational reasons why not such as system outages	operational reasons why not, such as system outages	1
37	7	machine learned	machine-learned	1
38	17	building a	building the	3
41	. 22	set to – to dictate	set to dictate	1
42	10	team, it	team. It	1
43	2-3	and Windows phones. If we need a new feature – each of which	and Windows phones, each of which	1
47	21	checking cashes, we rely heavily on cache items.	checking caches. We rely heavily on cached items.	3

Page	Line	Reads	Should Read	Reason
48	20-23	██████████████	██████████████	1
50	6	do the thing you are supposed to do	"do the thing you are supposed to do"	1
54	11	service to team to generate a preview	service to attempt to generate a preview	3
61	15	details	detailed	3
65	16	message's	Messages	3
65	17	post send	post-send	3
68	10	message's	Messages	3
69	11	pass	passed	3
72	24	sender allowed to send	sender is allowed to send	3
76	24	██████████████	██████████████	3 .
80	4	machine learned	machine-learned	3
80	24	,	that	1
81	19	to black	to the black	1
83	21	miss behave	misbehave	3
84	15	taken is	taken it is	3
87	3	small attachments	small. Attachments	3
89	19	is in sigma this is in	is in Sigma. This is in	3
101	9	sand attach reports	and attachments	3
119	8	that	[remove]	1
121	9	Is it	It is	3

Michael Adkins

3