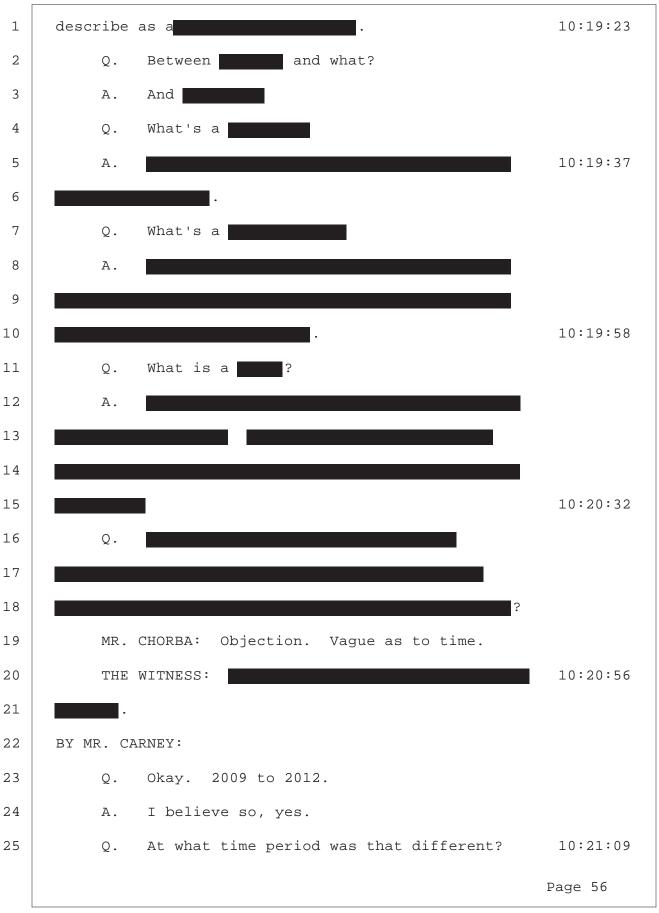
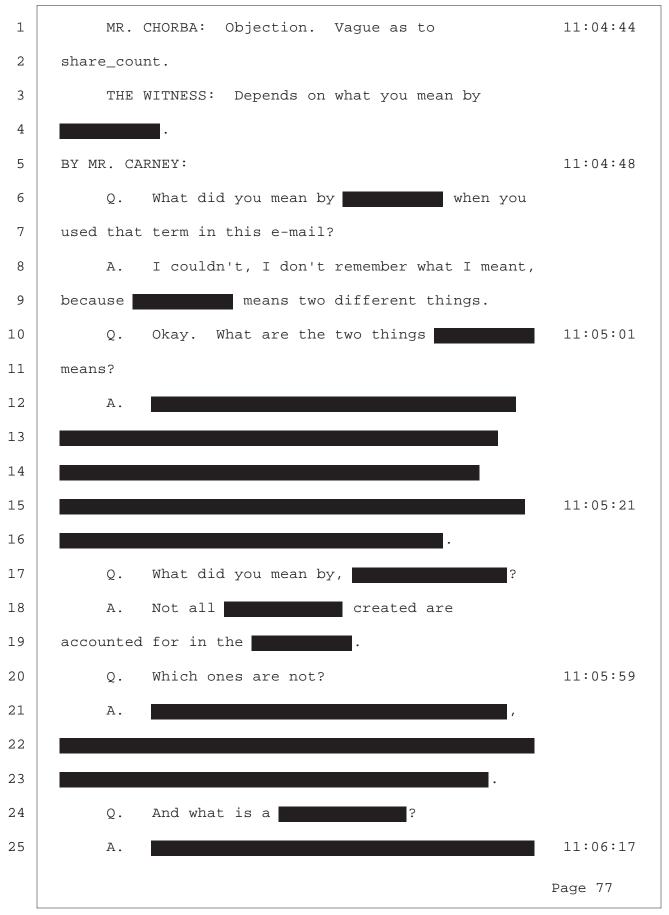
## EXHIBIT 12

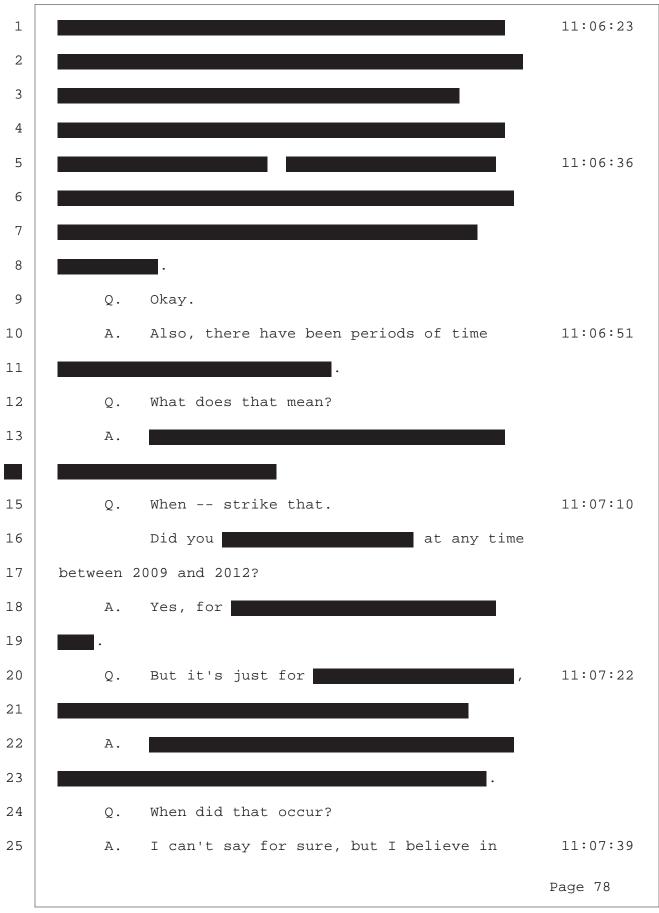
### REDACTED VERSION OF DOCUMENT(S) SOUGHT TO BE SEALED

# EXHIBIT CC

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1
                 UNITED STATES DISTRICT COURT
 2
               NORTHERN DISTRICT OF CALIFORNIA
 3
 4
                                       )
 5
    MATTHEW CAMPBELL, MICHAEL
    HURLEY, and DAVID SHADPOUR, on )
    behalf of themselves and all
6
    others similarly situated,
 7
                   Plaintiffs,
8
                                      ) Case No.
              vs.
9
                                      ) C 13-05996 PJH
10
    FACEBOOK, INC.,
                   Defendant.
11
12
           HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY
13
14
15
               VIDEOTAPED DEPOSITION OF RAY HE
                    Palo Alto, California
16
17
                  Friday, September 25, 2015
18
                           Volume I
19
20
2.1
    Reported by:
    CHRIS TE SELLE
    CSR No. 10836
22
    Job No. 2144894
23
2.4
25
    PAGES 1 - 273
                                               Page 1
```

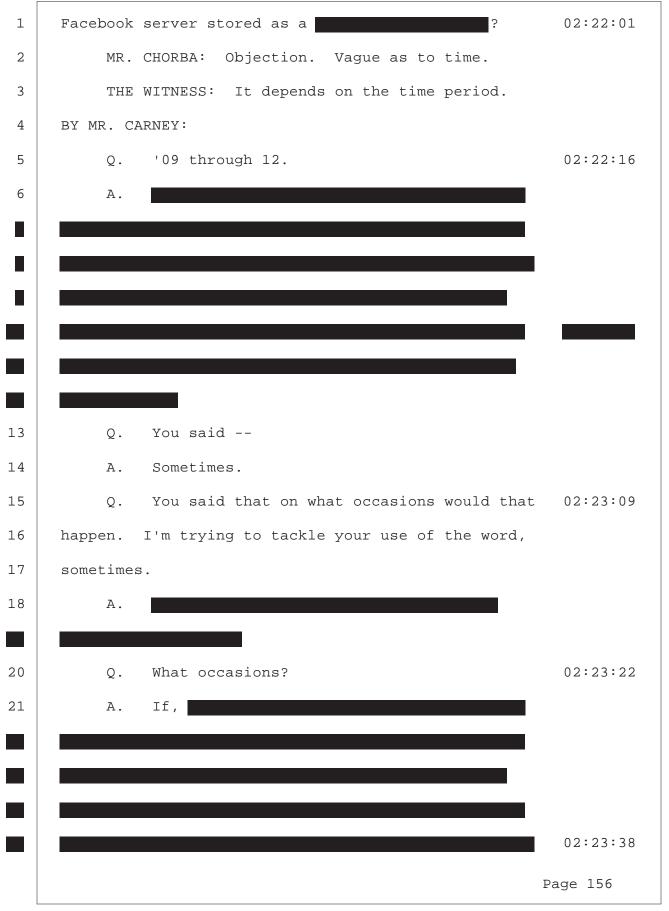






1	A. I believe the	11:37:12
2	·	
3	Q. Did you work on the	
4	?	
5	A. Yes.	11:37:32
6	Q. Who was that information made available	
7	strike that question.	
8		
	, who was that	
10	information made available to? Facebook employees	11:37:46
11	only, or third parties?	
12	A. It	
13		
14	Q. Did you ever	
		11:38:04
16	A. Yes.	
17	Q. And what was it?	
18	A.	
		11:38:22
21	Q. What were the other reasons?	
22	A	
23	Q. And was that functionality	
24		
25		11:38:44
		Page 91

1	Α.	No.	11:38:44
2	Q.	Do you see the term,, that's in the	
3	comments s	section?	
4	Α.	Yes.	
5	Q.	What is, as that term is used there?	11:39:05
6	Α.		
7	Q.	And in 2009,	
8	Α.	It depends on what you mean.	
9			
10			11:39:35
11	Q.		
12	?		
13	Α.		
14	Q.		
15			11:39:43
16	Α.	I would not be able to make a list of	
17	those from	m memory.	
18	Q.	Do you know any?	
19	Α.	At, depending on time, I might be able to	
20	remember a	a few.	11:40:00
21	Q.	Okay. Do you see down at the bottom of	
22	the page,	the heading, summary?	
23	Α.	Yes.	
24	Q.	Do you know whether you drafted that	
25	summary?		11:40:10
			Page 92



1	value, or	not at all.	02:23:42
2	Q.	Are there any other circumstances, other	
3	than	, that a would not	
4	be created	following the creation of aic	
5		?	02:23:55
6	Α.	So, you mentioned that the	
7	was create	d. The is not always	
8	created.	It's .	
9	Q.	Oh.	
10	Α.	It can be	02:24:07
11	Q.	In what circumstances is it ??	
12	A.	In the general case,	
13			
14	Q.	And you testified a moment ago that a	
15		, correct?	02:24:31
16	Α.	·	
17	Q.	?	
18	Α.	This is the .	
19	Q.	And what document are you looking at?	
20	A.	I'm looking at Exhibit 14.	02:24:47
21	Q.	And the, I'm sorry, the	
22	; is	that what you said?	
23	A.	Yes. If you look from, on the left, it's	
24	maybe the,	halfway down the page.	
25	Q.	I see it. And there is a string of 17	02:25:04
			Page 157

1	Q. And what are the circumstances that may 03:33:06
2	have caused strike that question.
3	If the user did not have JavaScript
4	enabled, would a have been created?
5	A. No. 03:33:30
6	Q. Does that mean that no would
7	have been created?
8	A. Yes.
9	Q. Does a have to come before
10	the ? 03:33:44
11	MR. CHORBA: Objection. Vague as to time.
12	THE WITNESS: Do you mean a would
13	never have, would not have to exist for a
14	to exist?
15	BY MR. CARNEY: 03:34:09
16	Q. In the context of URLs embedded in private
17	messages between 2010 and 2012, would a,
18	would an have to exist prior to the
19	creation of an example?
20	A. If, are we still under the premise that 03:34:26
21	the user has JavaScript enabled?
22	Q. JavaScript is enabled.
23	A. Okay. There must be an
24	before there is an, at any stage.
25	Q. At any stage. 03:34:41
	Page 190

1	A. Yes.	05:56:21
2	Q. What is it?	
3	A. It is the	
4		
5	Q. What is in the growing on a	05:56:43
6	And I'm looking at the second line	
7	there of the second paragraph.	
8	MR. CHORBA: Objection. Vague as to time.	
9	THE WITNESS: It does depend on time.	
10	BY MR. CARNEY:	05:57:02
11	Q. Let's start with January 24, 2012.	
12	A. The on a here	
13	refers to the, and that was the	
14	we previously talked	
15	about, so, Exhibit 14?	05:57:17
16	Q. Uh-huh. Who is the best person to talk to	
17	about the creation of source code for	
18	MR. CHORBA: Objection. Vague as to, best.	
19	BY MR. CARNEY:	
20	Q. Most knowledgeable.	05:58:14
21	MR. CHORBA: Answer, if you know.	
22	THE WITNESS: It depends on the time period in	
23	question.	
24	BY MR. CARNEY:	
25	Q. How about 2010 through 2012?	05:58:21
		Page 252

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 duly sworn; that a record
8	of the proceedings was made by me using machine
9	shorthand which was thereafter transcribed under my
L O	direction; that the foregoing transcript is a true
L1	record of the testimony given.
L 2	Further, that if the foregoing pertains to the
L 3	original transcript of a deposition in a Federal
L 4	Case, before completion of the proceedings, review
L 5	of the transcript [X] was [ ] was not requested.
L 6	I further certify I am neither financially
L 7	interested in the action nor a relative or employee
L 8	of any attorney or party to this action.
L 9	IN WITNESS WHEREOF, I have this date subscribed
20	my name.
21	
22	Dated:10/9/15
23	
24	<%signature>
	CHRIS TE SELLE
25	CSR No. 10836
	Page 273
	1436 275

Campbell et al. v. Facebook, Inc. Case No. 13-CV-05996-PJH In the Matter of:

September 25, 2015 Date of deposition:

Ray He Witness:

Reason codes:

-: 6. %

To clarify the record.

To conform to the facts.

To correct transcription errors.

Page	Line	Reads	Should Read	Reason
13	1	A. Master of engineering, and computer science and electrical engineering.	A. Master of Engineering of Computer Science and Electrical Engineering.	3
28	12	2	Q. Is A.	-
29	5	Q. And is the 2 A. I don't know for sure.	Q. And is the y? A.	1
30	7	2	8	3
32	7	A. A synonym for	A. A browser for the	1
39	22	I don't believe I worked directly on messages product ever.	I don't believe I worked directly on the messages product ever.	3
42	13	A. Is either a, I think he may have been an interim product manager. Q. Do you know what project he was the interim product manager for?	A. Is either a, I think he may have been an Intern Product manager. Q. Do you know what project he was the Intern Product manager for?	3
52	25	referred to it as	A. I think, I believe I referred to it as space.	3

or some successor to that 3	today?	3	A. If I said Mark Kinsey was an engineer, I 3 believe he was the Intern Product manager.	. 3	id,			rk Kinsey?	although we may have had an internal name of	A. It is not a tool in the same sense that it is not an 3	that we have been talking 3	to avoid risk of identifiable information per, I 3 think, IShepard or mvernal.	?	he 3
or some successor to that Q. And does product exist today? A. Yes.	reflected in Q. And is the A. I don't believe so.	A: An		A. It's an acronym.	Q. And then you said,	A.	Q. A.	eey? Q. Is mkinsey, Mark Kinsey? A. Yes.	and an interim name of although we may ha	same sense that it is not a fool in	that we have been about for the last five minutes?	25 37	Q. What is	A. That would be the
Q. And does or some product exist today? A. Yes.	Q. And is the the today?  A. I don't believe so.	9 A: An	A. If I said Mark Kinse believe he was the inter	A. It's acronym?	Q. And	A. Yes.	6 Q.	1 Q. Is M. Kinsey, Mark Kinsey? A. Yes.	although we may have l	A. It is not a tool in the	talking about for the last fi	274 - 5 - 2462		1 A. That would be the
53 1	53 9	65 19	70 25	72	79 19		92 16	93 21	21 26	101 8	102 2	120 25	128 21	129

23 2	3	3	8	3	3	3	1	3	3	-	8	3	3
		3	A.	A. If, for instance, this was posted on behalf of a page, I believe it would be different.	Q. Is it ?	A. Facebook has, with the introduction of	Q. And what if the user never hits send? Does the ? A. No, it never becomes a	A. It's just a, I believe, literally, in the code, it is	A. Appears to be a copy of an e-mail sent from cmishra to myself.		I believe he worked on it or he had input on the project leading up to F8 2011.	A. Without checking the code that this pulled its information out of.	Q. And what is 7 It's on the second line of the middle paragraph.
			A.	A. If, for instance, this was posted by a page on behalf of a page, I believe it would be different.	Q. Is it A. No.	A. Facebook has, with the introduction of	Q. And what if the user never hits send? Does the A. No.	A. It's just a, I believe, literally, in the code, it's, is,	A. Appears to be a copy of an e-mail sent from C. Mishra to myself.	Q. In June of 2010, was there a  And I'm just reading that next bullet point there.  A. That is, if you and I shared the same URL, the would be the same.	I believe he worked on it or he had input on the project leading up to FA 2011.	A. Without checking the code that this pulled it's information out of.	Q. And what is ? It's on the second line of the middle paragraph.
			4	24	23	12	14	3	12	6	13	8	2, 4
	throughout	throughout	163	174	178	179	197	212	221	223	241	247	251

	3	
A.	Q. And are you familiar with the term, ? A. Yes.	1000
А.	<ul><li>Q. And are you familiar with the term,</li><li>A. Yes.</li></ul>	
	23	
	262	

Date: November 11, 2015