

1 GIBSON, DUNN & CRUTCHER LLP
 JOSHUA A. JESSEN, SBN 222831
 2 JJessen@gibsondunn.com
 JEANA BISNAR MAUTE, SBN 290573
 3 JBisnarMaute@gibsondunn.com
 PRIYANKA RAJAGOPALAN, SBN 278504
 4 PRajagopalan@gibsondunn.com
 ASHLEY ROGERS, SBN 286252
 5 ARogers@gibsondunn.com
 1881 Page Mill Road
 6 Palo Alto, California 94304
 Telephone: (650) 849-5300
 7 Facsimile: (650) 849-5333

8 GIBSON, DUNN & CRUTCHER LLP
 CHRISTOPHER CHORBA, SBN 216692
 9 CChorba@gibsondunn.com
 333 South Grand Avenue
 10 Los Angeles, California 90071
 Telephone: (213) 229-7000
 11 Facsimile: (213) 229-7520

12 Attorneys for Defendant
 FACEBOOK, INC.

13
 14 UNITED STATES DISTRICT COURT
 15 NORTHERN DISTRICT OF CALIFORNIA
 16 OAKLAND DIVISON

17 MATTHEW CAMPBELL and MICHAEL
 HURLEY,

18 Plaintiffs,

19 v.

20 FACEBOOK, INC.,

21 Defendant.

Case No. C 13-05996 PJH (MEJ)

PUTATIVE CLASS ACTION

**DECLARATION OF MICHAEL ADKINS
 IN SUPPORT OF DEFENDANT
 FACEBOOK, INC.'S OPPOSITION TO
 PLAINTIFFS' MOTION FOR CLASS
 CERTIFICATION**

1 I, Michael Adkins, declare as follows:

2 1. I have been employed as a software engineer at Facebook since May 2010, and my
3 current title is Engineering Manager. I am over the age of 18. I have worked on the Facebook
4 Messages product to build anti-abuse, security, and anti-phishing systems for the Facebook Messages
5 product. My responsibilities generally involve ensuring the integrity of messages passing through
6 Facebook’s system to ensure that they are not malicious, fraudulent, or spam. My work thus
7 encompasses [REDACTED] one of Facebook’s suite of anti-abuse systems (also referred to as “Security”
8 systems). Unless otherwise stated, the following facts are within my personal knowledge and, if
9 called and sworn as a witness, I could and would testify competently to these facts.

10 2. I provide this Declaration to explain certain facts regarding Facebook’s software code
11 as it relates to Facebook’s [REDACTED] and other Security-related systems, particularly as they relate to
12 uniform resource locators (“URLs”) in messages sent and received through the Facebook platform, in
13 support of Facebook’s Opposition to Plaintiffs’ Motion for Class Certification.

14 3. As explained in further detail below, Facebook source code is configured to run [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]. Accordingly, there are many
18 instances when a URL or URL attachment generated in connection with a message will not lead to
19 the creation of a share object. Specifically, in those instances when a URL attachment is blocked by
20 [REDACTED] no share object will be created. Further, contrary to assertions I understand Plaintiffs have
21 made in this case, [REDACTED] uses share objects generated from URL attachments to messages for its
22 security and anti-abuse functions.

23 **Overview of [REDACTED]**

24 4. [REDACTED] to determine whether a
25 message or post, or information included with it – such as a URL – is malicious, fraudulent, or
26 otherwise harmful. For example, if a person using Facebook posts or sends a message with the URL
27 <http://clickmonkeys.com>, [REDACTED] would analyze the URL to determine

1 whether it is a harmful link containing spam, malware, a virus, or the like, and whether it is likely that
2 the sender's account has been hijacked (given that it sent a malicious or spammy URL or URLs).

3 [REDACTED] can likewise run things like [REDACTED]
4 [REDACTED]
5 [REDACTED].

6 5. One general purpose of Facebook's Security systems (including [REDACTED], among others)
7 is to protect people and their data when they use Facebook. For instance, Facebook encrypts user
8 activity (whether that involves posting a status update or sending a message) so that third parties
9 cannot access it in transit, and if an individual clicks on a spam post accidentally, Facebook's
10 detection tools determine whether a virus has infected the individual's browser or computer and helps
11 to remove it. [REDACTED], among other Security tools, was built to ward off attacks from cyber criminals,
12 hackers, and other such individuals or entities, so that all people legitimately using Facebook can
13 enjoy the site safely and confidently.

14 6. [REDACTED] runs a series of various filters and other mechanisms by which to detect abuse
15 or other fraudulent activity on Facebook; these include functions called [REDACTED] and
16 "Sigma." [REDACTED] the URL typed
17 in the text of the message [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]

22 [REDACTED]. Sigma, in turn, is a rules engine that runs a series of policies
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED].

1 to determine and help resolve any abuse- or security-related issues. [REDACTED]
2 [REDACTED] intended to detect large-
3 scale automated abuse (e.g., spam, malware, phishing, and other abuse). For example, Sigma [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]. Likewise, the [REDACTED]
7 [REDACTED]. Further, [REDACTED]
8 could be run through Facebook's [REDACTED]
9 [REDACTED].

10 11. [REDACTED]
11 [REDACTED], and that the sender was
12 allowed to send messages to that recipient (i.e. the recipient had not blocked that sender). This would
13 also include [REDACTED]
14 [REDACTED] qualify for delivery to the Inbox or
15 whether it should be directed to the "Other" folder, based on the sender-recipient(s) relationship and
16 the recipient's configured settings. The [REDACTED] code file (and other related files) provides
17 the context in which [REDACTED]
18 [REDACTED]. If
19 such an error occurred, the [REDACTED]. If such an error occurred with respect to a
20 URL attachment to a message, no share object would have been generated from that attachment.

21 12. Further, the [REDACTED] code file creates an object for the [REDACTED]
22 check containing data called a [REDACTED]. The [REDACTED] is a [REDACTED]
23 [REDACTED]
24 [REDACTED]. These features are extracted from the message and include data such as the
25 identity of the "target" (i.e. the intended recipient), whether or not the message is a reply to an
26 existing message or creates a new thread, the body of the message, and the data from any share object
27 associated with the message. Accordingly, [REDACTED] may use [REDACTED]
28

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]. Based on the [REDACTED]
4 [REDACTED]
5 [REDACTED], the sender might have seen the
6 following security prompt:



13 13. [REDACTED], including [REDACTED]
14 [REDACTED] to perform their anti-abuse- and security-related
15 functions. For instance, the “tracking information” about a URL contained in the global share object
16 for that URL – such as the number of times it was shared, and in what form (post, message, “Like”
17 Button click, comment, etc.), and the date the URL was first shared on Facebook – was available to
18 [REDACTED].

19 14. Third, when a sender or a recipient tried to view the sent message, [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]. It would once again run a [REDACTED]
23 [REDACTED] discussed in paragraphs 10-13 and if any of these threw an error, the message, part of the
24 message, or its URL attachment may not have been rendered to the recipient. Of course, this set of
25 checks would not occur if [REDACTED]
26 [REDACTED]
27 [REDACTED]

1 [REDACTED] If [REDACTED] did
2 detect that a URL attachment to the message was potentially dangerous when the recipient (or sender)
3 tried to view it in their inbox, it could have shown the following security protocol to the recipient (or
4 sender) when they tried to view the message and its attachment:



Ruth Putnam

1:29pm

This message is no longer available because it was identified as abusive or marked as spam.

9 15. Note that, if in this process, a [REDACTED]

10 [REDACTED]
11 [REDACTED]
12 [REDACTED] it could not render its URL
13 attachment to the recipient (or sender) trying to view that message. Facebook would [REDACTED]

14 [REDACTED]
15 [REDACTED]
16 [REDACTED].
17 **Variability Among Class Members and Over Time in Connection with [REDACTED]**

18 16. There was considerable variability in a given instance with respect to whether [REDACTED]
19 [REDACTED] on a message and any URL attachment
20 associated with it.

21 17. For efficiency reasons, the Sigma [REDACTED]

22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED]
27 [REDACTED]

1 [REDACTED]. Thus, [REDACTED]
2 presented by each message. It is impossible to know precisely what [REDACTED] will do given the
3 variability of the input and other data [REDACTED] at a given time.

4 18. Further, each individual [REDACTED], Sigma, and [REDACTED],
5 among others) could determine whether or not to [REDACTED]
6 [REDACTED]. For instance, if a sender
7 attempted to upload a malicious file, [REDACTED]

8 [REDACTED].
9 19. Further, Facebook's [REDACTED]

10 [REDACTED]
11 [REDACTED]

12 20. Similarly, as described earlier above, if a sender sent a message to a recipient
13 recognized as their Facebook friend, but the message contained a URL known to be a spammy link,

14 [REDACTED]
15 [REDACTED]
16 [REDACTED].

17 21. Alternatively, if a share object had been created, but was later determined by [REDACTED]
18 [REDACTED]
19 [REDACTED], so that it would not have rendered the URL preview
20 attachment to the sender or recipient if they later reopened that message in their Inbox or Sent
21 Messages folder.

22 22. Taking all of this variation together, at a minimum, determining whether a putative
23 class member's share of a URL in a message actually resulted in the transmission of a URL
24 attachment or creation of a share object depended, among other things, on whether the [REDACTED]
25 [REDACTED]
26 [REDACTED]. Such a determination
27 would require the following individualized inquiries *for each message*:
28

- 1 a. Was the message sent from the Facebook website, or was it sent using the Share
2 Plugin on a third party website?
- 3 b. Did the sender either copy and paste a URL into the draft message text field, or type a
4 URL into the draft text and press the space bar?
- 5 c. Was the URL to a third-party webpage (as opposed to a Facebook webpage)?
- 6 d. Was the sender using a browser that is JavaScript capable?
- 7 e. Did the sender have JavaScript enabled in her browser?
- 8 f. Did any of the [REDACTED]
9 [REDACTED]
10 [REDACTED]
- 11 g. When the message was sent, [REDACTED]
12 [REDACTED]
13 [REDACTED], or Sigma [REDACTED]
14 [REDACTED]
15 [REDACTED], among other things?
- 16 h. After the message had been sent, and the sender or recipient attempted to view it, was
17 the URL attachment, or part of the message, or the whole message, [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]?

22 23. To my knowledge, neither Facebook nor any other entity possesses the data that would
23 be required to ascertain the answers to the inquiries in paragraph 22(a)-(g), either on an individual or
24 bulk basis, for putative class members.

1 I declare under penalty of perjury under the laws of the United States of America that the
2 foregoing is true and correct and that this declaration was executed on January 14, 2016, in Menlo
3 Park, California.

4
5 /s/ Michael Adkins

Michael Adkins

ATTORNEY ATTESTATION

1 I, Christopher Chorba, attest that concurrence in the filing of this Declaration of Michael
2 Adkins has been obtained from the signatory. I declare under penalty of perjury under the laws of the
3 United States of America that the foregoing is true and correct. Executed this 15th day of January,
4 2016, in Los Angeles, California.
5

6 Dated: January 15, 2016

/s/ Christopher Chorba
Christopher Chorba