

EXHIBIT 1

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

7 GIBSON, DUNN & CRUTCHER LLP
GAIL E. LEES, SBN 90363
8 GLees@gibsondunn.com
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 DIVISION

17 MATTHEW CAMPBELL, MICHAEL
HURLEY, and DAVID SHADPOUR,

18 Plaintiffs,

19 v.

20 FACEBOOK, INC.,

21 Defendant.
22

Case No. C 13-05996 PJH (MEJ)

PUTATIVE CLASS ACTION

**DECLARATION OF DALE HARRISON
ON BEHALF OF DEFENDANT
FACEBOOK, INC.**

1 I, Dale Harrison, declare as follows:

2 1. I have been employed as a software engineer at Facebook since August 2014, and my
3 current title is Engineering Manager. I am over the age of 18. In connection with the above-
4 captioned case, I conducted a search for and extraction of certain data, as described further below,
5 and provided the extracted data to Facebook’s counsel, who I understand produced that data to the
6 Plaintiffs in this case. I submit this declaration in response to the Court’s Minute Entry following the
7 Telephonic Discovery Hearing on September 29, 2015 (Dkt. 118). Specifically, this declaration
8 explains the time-consuming processes I undertook to gather the data already provided to Plaintiffs,
9 as well as the amount of additional time and burden it would take to attempt to gather the additional
10 data that I understand Plaintiffs are requesting (assuming that it were possible to gather that
11 additional data, which it likely is not, and certainly not without significant additional work, for the
12 reasons described below). Unless otherwise stated, the following facts are within my personal
13 knowledge and, if called and sworn as a witness, I could and would testify competently to these facts.

14 **Plaintiffs’ Requests for Information**

15 2. I understand that Plaintiffs in this case asked Facebook to identify:

- 16 • A list of all the Objects and Associations created during the process of sending a given
17 Message
18 • All associated objects, including id, object type, and key/value pair (including for any
19 URLs shared in the message); associations with source object association type,
20 destination object, and key/value pair; database name and tables storing each
21 association and object; each application or feature using each object or association;
22 and how those objects are used by Facebook.
23 • For each object, identification and production of the Object’s attributes.

24 3. I understand that Plaintiffs seek the above information related to 19 specific messages
25 that Plaintiffs had sent or received. I further understand that Plaintiffs have represented that each of
26 those 19 messages contained a Uniform Resource Locator (“URL”)—*i.e.*, a link to a website.
27

1 **Summary of Search Results and Burden**

2 4. In connection with Plaintiffs' requests, I was provided with information about 19
3 messages that Plaintiffs sent or received. The information included the message senders, recipients,
4 dates and times, and URLs contained in the messages. As explained in greater detail below,
5 searching for these messages and extracting the relevant data was a time-consuming and labor-
6 intensive process, and despite my extensive efforts, I was unable to locate 3 of the messages at all.

7 5. For the 16 messages I did locate, I was able to extract several pieces of information
8 relating to those messages. The information I extracted included:

- 9 a. [REDACTED]
10 [REDACTED]
- 11 b. [REDACTED]
12 [REDACTED]
- 13 c. [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
- 17 d. [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]

21 6. [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED] which
25 would be responsive to Plaintiffs' request for information about each application or feature using
26 each object or association, and how those objects are used by Facebook.

1 7. The Objects identified, extracted, and already produced to Plaintiffs— [REDACTED]
2 [REDACTED]—are the
3 only Objects created in connection with sharing URLs in messages.

4 8. Nonetheless, I understand that Facebook has provided to Plaintiffs the additional
5 information I located through my extensive searching—specifically, [REDACTED]
6 [REDACTED] for the 16 messages I located.

7 9. There is no automated or otherwise reasonable way to go beyond that and identify and
8 gather information about any additional Objects and Associations (if any) that may have been created
9 in connection with these 16 messages. [REDACTED]

10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED] Similarly, I am not aware of any automated or otherwise
15 reasonable mechanism for identifying other specific applications or uses of any other potential
16 Objects and Associations. I also have inquired with others within Facebook who would know, and
17 they were unable to identify any automated or reasonable mechanism for locating this information.

18 **Background on Objects, Associations, and Searchability**

19 10. I first wish to provide the Court with some background on Facebook and the relevant
20 vocabulary here. Facebook is the world’s largest social network and has over 1 billion monthly
21 active users worldwide. Given its size, Facebook’s software processes billions of actions per day,
22 which involves processing and storing, in one way or another, billions of pieces of data per day. [REDACTED]

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

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 11. "Associations" refer to relationships between certain data in Facebook's system. By
5 way of example only, the act of physically clicking a "Like" button on a third-party website may
6 result in the creation of an Association between (a) the Object that represents the User who clicked
7 the Like button, and (b) the Object that represents the URL of the third-party website. Associations
8 exist as notations in the related Objects. Some events do not result in creation of any Associations.

9 12. There is currently no search functionality to identify all Objects created in connection
10 with the actions of a given Facebook user. Nor is there currently any search functionality to identify
11 all Objects created in connection with a given Facebook message. In my experience, developing such
12 functionality would likely be impossible, and at a minimum it would require hundreds of hours of
13 engineering time.

14 **Procedure for Extracting the Produced Material**

15 13. In order to locate and extract the above data for these messages, I was required to
16 write new software code using [REDACTED]
17 [REDACTED] to find information about the messages in Facebook's internal system. Where successful,
18 the results of each search returned information for each message, stored in Facebook's systems. This
19 was a message-by-message exercise. Using this process, I was able to locate, extract, and provide
20 information relating to 16 of the 19 messages. I understand that this information, referred to as
21 [REDACTED] was produced to Plaintiffs.

22 14. As noted above, despite my best efforts, I was unable to locate 3 of the 19 messages.
23 There are a number of possible reasons for this. For example, for one of the messages, I understand
24 that Plaintiffs were unable to provide [REDACTED]
25 [REDACTED]
26 Without this data, I could not locate the message. It is also possible that Plaintiffs may have deleted
27 certain messages (though I am informed that Plaintiffs represented this was not the case). At any
28

1 rate, as a result of the new code I wrote, I was able to locate information for 16 of the 19 messages
2 selected by Plaintiffs.

3 15. [REDACTED]

4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED] Using this process, I was able to locate, extract, and provide
10 URL share information relating to 9 of the 16 messages. I understand that this information, referred
11 to as [REDACTED] was produced to Plaintiffs. 7 of the 16 messages did not have a [REDACTED]

12 16. [REDACTED]

13 [REDACTED]
14 [REDACTED]
15 [REDACTED] Using this process, I was able to locate, extract, and provide information
16 relating to the 9 URLs in the 9 [REDACTED] I understand that this information, referred to as
17 [REDACTED] was produced to Plaintiffs.

18 17. At the request of Facebook's counsel, after providing the above information, I
19 continued to search for any *other* Objects that could have been created in connection with processing
20 the 16 messages I located. Neither I, nor any other person to my knowledge, is aware of all possible
21 Objects that could be created in connection with processing a Facebook message. However, I knew
22 that it was likely that at least one other Object was created in connection with each message.

23 [REDACTED]
24 [REDACTED] This was a message-by-message
25 exercise. Using this process, I was able to locate, extract, and provide additional information relating
26 to 16 of the 19 messages. I understand that this information, referred to as [REDACTED] was
27 produced to Plaintiffs.
28

1 18. In total, working with counsel over the course of August and September, I estimate
2 that I spent more than 25 hours writing new code and conducting the manual searches and extractions
3 outlined above.

4 **Estimated Burden for Identifying and Producing Additional Objects and Associations**

5 19. I understand that Plaintiffs also seek *all* other Objects related to each of the 16
6 messages that I was able to identify. This is likely impossible. If ordered to do so, I would first have
7 to attempt to ascertain the identity of every Object or Association that could possibly be generated
8 from a message, which may require consulting with engineers in every group who have worked on
9 every past or present product or feature at Facebook (thousands of individuals) to find out what
10 Objects each engineer believes can be generated as a result of their work at Facebook, and whether
11 any of those Objects could be generated from sending a message. This also would require consulting
12 former employees who would have this information. As a part of this exercise, I would also have to
13 try to ascertain where in the Facebook system each of these types of Object may exist. Second, I
14 would be required to try to assess what existing Facebook search functionality and tools are available
15 for searching for, locating, and extracting, each such Object type. As noted above, there is no search
16 function that returns all Objects for a given user; however, if I were to learn of an Object type that
17 may exist for these messages, it may be that there is existing search functionality for locating and
18 extracting that Object. Depending on the existing functionality, it might be necessary to write new
19 code to identify or extract such Objects, either individually or potentially in batch form. It is unclear
20 whether this would be possible. My best estimate is that, if search functionality either exists or could
21 be developed to identify and extract this information, it could take hundreds of man hours to do so.
22 Depending on how many objects there are, it could take a much longer period of time.

23 **Identifying Applications or Features or other Use of Objects and Associations**

24 20. I understand that Plaintiffs also asked Facebook to identify each application or feature
25 in Facebook that can use the Objects and Associations for each of these messages. But the
26 comprehensive record of Facebook functions that used any given Object or Association type at any
27 given time is Facebook's source code. And it is outside the scope of any single engineer's personal
28 knowledge—and would be exceedingly burdensome to review the source code in its entirety—to

1 **ATTORNEY ATTESTATION**

2 I, Joshua A. Jessen, attest that concurrence in the filing of this Declaration of Dale Harrison
3 has been obtained from the signatory. I declare under penalty of perjury under the laws of the United
4 States of America that the foregoing is true and correct. Executed this 6th day of October, 2015, in
5 Irvine, California.

6
7 Dated: October 6, 2015

8 */s/ Joshua A. Jessen*
9 Joshua A. Jessen