

COOLEY LLP
MICHAEL G. RHODES (116127) (rhodesmg@cooley.com)
WHITTY SOMVICHIAN (194463) (wsomvichian@cooley.com)
KYLE C. WONG (224021) (kwong@cooley.com)
101 California Street, 5th Floor
San Francisco, CA 94111-5800
Telephone: (415) 693-2000
Facsimile: (415) 693-2222

Attorneys for Defendant
GOOGLE INC.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

IN RE GOOGLE INC. GMAIL
LITIGATION

Case No. 5:13-md-002430 LHK (PSG)

**DECLARATION OF HAN LEE IN
SUPPORT OF DEFENDANT
GOOGLE INC.'S ADMINISTRATIVE
MOTION TO FILE DOCUMENTS
AND PORTIONS OF DOCUMENTS
UNDER SEAL**

Judge: Hon. Lucy H. Koh
Dept: Courtroom 8 – 4th Floor

I, Han Lee, declare:

1. I am a Software Engineer at Google Inc. (“Google”) and am familiar with Google’s internal systems related to Gmail, as well as the general business decision-making and strategy related to those systems. I submit this declaration in support of Google’s Administrative Motion to File Documents and Portions of Documents Under Seal (the “Motion to Seal”). I have personal knowledge of the facts set forth in this Declaration, and if called to testify, I could and would testify competently thereto.

2. The Motion to Seal seeks to seal Exhibits E, G, L, O, P, W, and AA to the Declaration of Proposed Class Counsel Sean F. Rommel in Support of Plaintiffs’ Consolidated Motion for Class Certification (each a “Rommel Exhibit”) in their entirety. The Motion to Seal

1 also seeks to seal certain information within Plaintiffs' Consolidated Motion for Class
 2 Certification ("Plaintiffs' Motion"), and Rommel Exhibits A, C, D, I, J, M, Q, S, T, U, and V.
 3 This is information that Google designated "CONFIDENTIAL" or "CONFIDENTIAL –
 4 ATTORNEYS' EYES ONLY" under the terms of the stipulated protective order, entered on June
 5 17, 2013 in this matter ("Protective Order," ECF No. 48), or is derived from that protected
 6 information. These materials contain Google's proprietary and highly confidential information,
 7 which derives much of its value from its confidentiality.

8 3. The documents Plaintiffs incorporate into their motion for class certification
 9 reference information that is non-public and would cause competitive harm to Google, or could
 10 cause harm to Gmail users, if not sealed (the "Sealable Information"). Below, I provide the Court
 11 with (i) an explanation of the Sealable Information generally; (ii) specific explanations as to why
 12 each document Google seeks to seal in its entirety would harm Google or its users if disclosed;
 13 and (iii) a table identifying each redaction Google seeks to make along with Google's reason for
 14 the redaction.

15 4. Plaintiffs also re-filed under seal several documents that have already been sealed
 16 in whole or in part by this Court in *Dunbar v. Google Inc.*, No. 12-cv-03305-LHK (*Dunbar* ECF
 17 No. 292, filed Aug. 18, 2013). This Court sealed Rommel Exhibits H and K in their entirety,
 18 finding that both documents "cover[] essentially nothing but Google's proprietary information."
 19 (*Dunbar* ECF No. 292). Similarly, Rommel Exhibit N has already been sealed by the *Dunbar*
 20 Court with Google's proposed limited redactions. (*Dunbar* ECF No. 292.) As a result, while
 21 Google asks that the Court seal these additional copies, I do not repeat Google's justifications for
 22 sealing these documents below.

23 GENERAL EXPLANATION

24 5. Google discloses to Gmail users that it filters and scans the text of Gmail
 25 messages, and it also discloses what it uses that information for, including, for example, to filter
 26 spam, to detect viruses, to help users organize their inboxes by importance, and to deliver
 27 personalized advertising. Users consent to that scanning and the use of information under
 28 Google's terms of service and privacy policy. Thus, the fact that Google scans emails and uses

1 scanned information is not confidential, and Google does not seek to seal those facts.

2 6. However, the mechanics of how Google performs those processes are sensitive,
3 both for user security reasons and for competitive reasons. The specific techniques that Google
4 uses to implement Gmail's processes, the systems and infrastructure it uses to apply those
5 processes, and the sequence in which it applies those processes are the result of over nine years of
6 development by Google's engineers. We designed the Gmail system to be secure so that we can
7 provide secure email services to our users. We also designed the Gmail system so that we can
8 maximize the speed of Gmail while at the same time providing a large number of unique features
9 to users that our competitors do not offer. And, we designed the Gmail system so that we can
10 scale, and so that the system is efficient in terms of data storage and retention.

11 7. Security is a crucial Gmail feature. Email accounts are frequently targeted by
12 unwanted messages, known as "spam." The spam emails include not only unwanted advertising,
13 but also outright scams that attempt to lure recipients to participate in fraudulent schemes. In
14 addition, even messages that are well-intentioned and sent by persons known to the recipient may
15 be harmful if they contain attachments which have been infected by computer viruses, worms, or
16 Trojan horses. Google has designed the Gmail system to prevent harmful materials from reaching
17 Gmail users' inboxes, to categorize spam as such and segregate it from emails that users are more
18 likely to desire, and to flag materials containing viruses or other such harmful content. Google's
19 ability to combat spammers, hackers, and others who propagate these unwanted or harmful
20 materials would be impaired if those individuals had visibility into Google's defenses. For
21 example, Google does not publicly disclose when its scanning for spam and viruses occurs in the
22 sequence of email processing, whether its scanning to detect spam and viruses happens once or
23 multiple times, or whether these scanning processes occur together or separately. The
24 confidentiality of this information is important to ensure that Google is able to prevent harm to its
25 users. For example, a hacker who believes that his Trojan horse will be captured by a spam filter
26 might act differently than a hacker who believes that his Trojan horse will be assessed
27 independently of spam filtering.

28 8. Gmail's speed is also a valuable feature for users, and that speed is a major

1 competitive advantage for Google—particularly in light of the numerous email-related features
2 that Google offers, such as spam filtering, virus detection, personalized advertising, automatic
3 organization of incoming emails by importance, spellchecking, search within email, automatic
4 saving and sorting into folders, and converting text URLs to clickable links. Google has spent
5 years developing a system that can provide all of these features while still delivering email almost
6 instantly to users. Gmail’s speed is in large part a result of the sequencing and organization of the
7 Gmail system for processing incoming email. Changes to the sequencing and organization of the
8 Gmail system directly impact the speed at which Gmail operates. I do not know how our
9 competitors structure their webmail infrastructures. But, I do know that it has taken the Gmail
10 team years of experimentation, iteration, and engineering time to develop our email infrastructure
11 to optimize speed without sacrificing product features, and I do not believe that our competitors
12 could achieve the same results without significant investment.

13 9. Another objective achieved by Google’s proprietary system design is to permit
14 scaling. As the number of Gmail features and Gmail users has grown, Google has had to develop
15 ways to more efficiently manage the many email features it offers. In some cases, this has
16 resulted in pieces of infrastructure specifically dedicated to a specific task, or to systems being
17 connected to one another in a specific way, in a manner that a competitor would not realize was
18 superior without substantial experimentation at significant cost. Google’s ability to scale its
19 system is in large part a result of the sequencing and organization of Google’s systems for
20 processing incoming email.

21 10. The Gmail system is also designed for efficient data storage. Gmail has many
22 millions of users, most of whom receive numerous email messages. One of Gmail’s benefits to
23 users, and competitive advantages in the marketplace, is its ability to provide users with a large
24 amount of storage. Google’s ability to provide users with such substantial storage space is a
25 result of both the organization of Google’s systems and of confidential Google processes related
26 to when and how certain information related to emails is retained.

27 1. As noted, Google has developed its systems at substantial cost and through
28 substantial effort spanning multiple years. And indeed, Google continues to work on developing

1 methods to improve its features, including superior spam and virus detection. Exposure of the
 2 details of Google's systems would reduce Google's ability to defend Gmail users against
 3 unwanted messages and harmful message content. Moreover, if Google's competitors were able
 4 to access the details of Google's systems, they could simply copy Google's methods, depriving
 5 Google of a competitive advantage it earned through years of costly innovation, and giving
 6 Google's competitors the unfair advantage of implementing similar systems without the cost and
 7 effort of developing them independently. In addition, Google's competitors could potentially pair
 8 Google's proprietary methods with their own innovations—which are unknown to Google—
 9 giving them a product superior to what natural competition would have developed and putting
 10 Google at a competitive disadvantage.

11 **INDIVIDUAL DOCUMENT EXPLANATIONS**

12 11. Google seeks to seal in their entirety seven exhibits, which were put forward by
 13 Plaintiffs as Rommel Exhibits E, G, L, O, P, W, and AA, filed on October 25, 2013. Each of
 14 these documents consists entirely or almost entirely of sensitive nonpublic information whose
 15 revelation would be harmful to Google or to another person, as explained below. Because of the
 16 substantive information in these documents is entirely confidential, filing a public redacted
 17 version of any of these documents would not provide any substantial or comprehensible
 18 information to the public. Rommel Exhibits H and K, also lodged under seal on October 25,
 19 2013, are not discussed below because they have already been sealed in their entirety by this
 20 Court in the *Dunbar* matter. (*Dunbar* ECF No. 292).

21 **Rommel Exhibit E**

22 12. Rommel Exhibit E is a compilation of Google documents from centralized file
 23 sources designed specifically to give Google's own engineers detailed information about how
 24 Google's systems function. Exhibit E contains charts, links, and extensive textual explanations of
 25 how all of Google's systems work together to receive, process, deliver, and send emails through
 26 the Gmail server. The documents even provide helpful examples and simplified flow charts to
 27 ensure that the intended audience—a Google engineer—understands Gmail's inner workings.
 28 This highly detailed information is so dense, and so sensitive, that to redact the sensitive

1 information would leave virtually no substance unredacted. These internal Google documents
2 describe in intricate detail not only how various pieces of Gmail architecture work, both
3 independently and together, but also how changes in one system impact the larger Gmail
4 ecosystem. These explanations run the gamut from schematics showing the flow of information
5 through different Gmail systems, to prose explanations of Gmail's core components, to step-by-
6 step explanations of how Gmail functions at the most detailed level. The documents also contain
7 a substantial quantity of source code.

8 13. Public disclosure of this information would harm Google by giving competitors
9 direct insight into technical aspects of the Gmail system that give it a competitive advantage in
10 the marketplace. There is no industry standard for implementing the processes illustrated and
11 discussed in Rommel Exhibit E. Rather, the specific architecture, systems, and processes
12 illustrated and explained in Exhibit E are the result of years of trial and error by Google's
13 engineers to optimize the functioning of Google's Gmail systems. If Rommel Exhibit E were
14 publicly disclosed, Google's competitors would know, among other things, (1) what servers and
15 other hardware are used in Google's processes; (2) whether Google performs particular technical
16 functions separately or in combination; and (3) the specific *sequencing* of the various technical
17 processes. These highly proprietary details are critical to the functioning of the Gmail system and
18 to Google's competitive position.

19 14. For example, the technical details set out in Rommel Exhibit E are a significant
20 part of what determines the overall speed of the Gmail system. The speed of Gmail is a valuable
21 feature for users, and that same speed is a major competitive advantage for Google—particularly
22 in light of the numerous email-related features that Google offers, such as spam filtering, virus
23 detection, automatic organization of incoming emails by importance, spellchecking, search within
24 email, automatic saving and sorting into folders, converting text URLs to clickable links, and
25 personalized advertising. Google has spent years developing a system that can run numerous
26 processes on incoming email while still delivering email almost instantaneously to users. Gmail's
27 speed is in large part a result of the sequencing and organization of Google's systems for
28 processing incoming email, which is illustrated and described in Rommel Exhibit E.

1 15. Another objective achieved by Google's proprietary system design is to permit
2 scaling. As the number of Gmail features and Gmail users has grown, Google has had to develop
3 ways to more efficiently manage the many email features it offers. In some cases, this has
4 resulted in pieces of infrastructure specifically dedicated to a specific task, or to systems being
5 connected to one another in a specific way, in a manner that a competitor would not realize was
6 superior without substantial experimentation at significant cost. Google's ability to scale its
7 system is in large part a result of the sequencing and organization of Google's systems for
8 processing incoming email, as reflected in Rommel Exhibit E.

9 16. The information reflected in Rommel Exhibit E is nonpublic, and Google takes
10 care to keep that information confidential. If Google's competitors were able to access this
11 information, they could simply copy Google's methods, depriving Google of a competitive
12 advantage it earned through years of costly innovation. Competitors would receive the unfair
13 advantage of implementing similar systems without the cost and effort of developing them
14 independently. In addition, Google's competitors could potentially pair Google's proprietary
15 methods with their own innovations—which are unknown to Google—giving them a product
16 superior to what natural competition would have developed, and putting Google at a competitive
17 disadvantage. Moreover, as noted, exposure of the details of Google's methods would reduce
18 Google's ability to defend Gmail users from unwanted messages and harmful message content.
19 Rommel Exhibit E raises all of these concerns throughout the document, and as such Google
20 respectfully requests that the Court file Exhibit E only under seal.

21 **Rommel Exhibit G**

22 17. Rommel Exhibit G is a Google document explaining the functions of the Medley
23 Server, a piece of Google's infrastructure. Google apportioned certain tasks to the Medley Server
24 based upon extensive experimentation and design, none of which is public information. If this
25 information were made public, a Google competitor could simply copy Google's organization.
26 Competitors would receive the unfair advantage of implementing a similar system without the
27 cost and effort of developing it independently. In addition, Google's competitors could
28 potentially pair Google's proprietary methods with their own innovations—which are unknown to

1 Google—giving them a product superior to what natural competition would have developed, and
2 putting Google at a competitive disadvantage. Because Rommel Exhibit G contains
3 competitively sensitive and confidential information, Google respectfully requests that this Court
4 file Rommel Exhibit G under seal in its entirety.

5 **Rommel Exhibit L**

6 18. Rommel Exhibit L contains an email exchange between Google employees
7 analyzing different Gmail systems' ability and proficiency at performing certain tasks. The
8 emails in Rommel Exhibit L reveal highly confidential and proprietary information about how
9 specific pieces of Gmail architecture function and interact, what information in emails Google
10 considers valuable for its advertising services, which systems Google was seeking to improve,
11 and how and why Google was seeking to improve those systems. These emails describe
12 proprietary engineering and design information that took years of costly work and
13 experimentation to develop. If disclosed, Rommel Exhibit L would provide Google competitors
14 with an understanding of Gmail's internal architecture and its efforts to improve its systems.
15 Competitors who viewed this information would receive the unfair advantage of implementing
16 similar reporting systems without the cost and effort of developing them independently. Because
17 of the harm that would be caused by the disclosure of this confidential information, Google
18 respectfully requests that this Court file Rommel Exhibit L under seal.

19 **Rommel Exhibit O**

20 2. Rommel Exhibit O is a Google document titled, "User Profile Attributes." The
21 stated objective of this document is to identify specific information that the author, a Google
22 employee, believed could be collected from users and used in improving Gmail's services,
23 including targeted advertising. The document also spells out the information, why it is needed,
24 and how it can be obtained, and offers suggestions for improving the user experience in various
25 ways. Because the document consists entirely of an analysis of what information Google does
26 and does not already collect, why that information is important, and how Google can efficiently
27 obtain it, the document consists of little more than a roadmap to improving an email system
28 similar to Gmail. Competitors who viewed this information would receive the unfair advantage

1 of implementing similar systems without the cost and effort of developing them independently.
 2 Moreover, a Google competitor armed with this information could combine it with information it
 3 had developed with its own resources, combining Google's confidential information with its own
 4 product to obtain a competitive advantage over Google. Because Rommel Exhibit O raises these
 5 concerns throughout the entire document, Google respectfully requests that the Court file Exhibit
 6 O only under seal.

7 **Rommel Exhibit P**

8 19. Rommel Exhibit P contains a Google document titled, "Gmail ads session
 9 analysis," in which a Google employee describes in great detail an experiment he conducted in
 10 order to get a better understanding of how users interact with Gmail and why they click on ads.
 11 The engineer includes the exact information he believed was important to discover, the
 12 experiment he ran to obtain that information, and the results he obtained. He also proposes ways
 13 the Gmail engineering team can use his research to improve Google's advertising services.
 14 Rommel Exhibit P thus provides detailed insight into an aspect of Google efforts to improve its
 15 services. If this information were made public, a Google competitor could simply copy the
 16 methodology and results of this experiment and reach Google's same conclusions without
 17 undertaking any of the cost or effort of designing its own systems and running its own
 18 experiments. Competitors would receive the unfair advantage of implementing similar systems
 19 without the cost and effort of developing them independently. In addition, Google's competitors
 20 could potentially pair Google's proprietary methods with their own innovations—which are
 21 unknown to Google—giving them a product superior to what natural competition would have
 22 developed, and putting Google at a competitive disadvantage. Because Rommel Exhibit P
 23 contains competitively sensitive and confidential information, Google respectfully requests that
 24 this Court file Rommel Exhibit P under seal in its entirety.

25 **Rommel Exhibit W**

26 20. Rommel Exhibit W is an internal Google report containing details related to
 27 Plaintiff Keith Dunbar's email account. This report reveals the way that Google organizes user
 28 information and what information Google has determined—through the work of its engineers and

1 years of practical experience—should be readily accessible. Exhibit W also contains information
 2 about the different features and possible settings of Gmail accounts, revealing the way that
 3 Gmail’s internal technological processes work. Rommel Exhibit W, with its detailed fields, links,
 4 and codes, discloses how Google processes and maintains a user’s account. A competitor
 5 reviewing this document would obtain valuable information about how Google’s internal
 6 processes work, providing that competitor with an unfair competitive advantage in that the
 7 competitor would be able to copy Google’s processes instead of having to develop its own. If
 8 publicly disclosed, this information would thus allow Google’s competitors, not to mention
 9 potential hackers, insight into Google’s systems that would likely cause Google or its users harm.

10 21. Additionally, Rommel Exhibit W provides detailed confidential information that is
 11 unique to Plaintiff Dunbar, a Google Apps user, including his email address and the name he
 12 listed for his account. Google’s general policy is to protect user information, and it would be
 13 against Google’s policy to reveal this type of personal information about a user. For these
 14 reasons, Google respectfully requests that this Court seal Rommel Exhibit W in its entirety.

15 **Rommel Exhibit AA**

16 22. Rommel Exhibit AA is a compilation of Google documents from centralized file
 17 sources designed specifically to give Google’s own engineers detailed information about how
 18 Google’s systems function. Exhibit AA contains links and extensive textual explanations of how
 19 certain Google systems work together to provide specified features to users of Google-powered
 20 email. This highly detailed information is so dense, and so sensitive, that to redact the sensitive
 21 information would leave virtually no substance unredacted. What information was not redacted
 22 would make no sense to a reader, and thus provide no value to him or her.

23 23. Public disclosure of this information would harm Google by giving competitors
 24 direct insight into technical aspects of the Gmail system that give it a competitive advantage in
 25 the marketplace. There is no industry standard for implementing the processes illustrated and
 26 discussed in Rommel Exhibit AA. Rather, the specific architecture, systems, and processes
 27 illustrated and explained in Exhibit AA are the result of years of trial and error by Google’s
 28 engineers to optimize the functioning of Google’s Gmail systems. If Rommel Exhibit AA were

publicly disclosed, Google's competitors would know, among other things, how certain specific portions of Google's advertising system related to Gmail worked, in intricate detail. These highly proprietary details are highly important to the functioning of the Gmail system and to Google's competitive position.

24. The information reflected in Rommel Exhibit AA is nonpublic, and Google takes care to keep that information confidential. If Google's competitors were able to access this information, they could simply copy Google's methods, depriving Google of a competitive advantage it earned through years of costly innovation. Competitors would receive the unfair advantage of implementing similar systems without the cost and effort of developing them independently. In addition, Google's competitors could potentially pair Google's proprietary methods with their own innovations—which are unknown to Google—giving them a product superior to what natural competition would have developed, and putting Google at a competitive disadvantage. Moreover, as noted, exposure of the details of Google's methods would reduce Google's ability to defend Gmail users from unwanted messages and harmful message content. Rommel Exhibit AA raises all of these concerns throughout the document, and as such Google respectfully requests that the Court file Exhibit AA only under seal.

INDIVIDUAL REDACTION EXPLANATIONS

25. Google asks the Court to seal very limited portions of twelve documents: Plaintiffs' Motion, and Rommel Exhibits A, C, D, I, J, M, Q, S, T, U, and V. Versions of these documents with limited redactions are attached to this declaration as Lee Exhibits A through L. The following table explains in detail the reasons why each redaction in Lee Exhibits A through L redacts Sealable Information. Because Rommel Exhibit N has already been filed under seal with Google's proposed limited redactions, I do not repeat Google's justifications for sealing that information in the table below. (*Dunbar* ECF No. 292.)

Document and Portion to be Sealed	Description of Sealable Information	Potential Harm from Disclosure
Lee Exhibit A <ul style="list-style-type: none"> Page i, lines 8, 11, 13 Page 3, line 14 	When read in the context of the surrounding unredacted information, this redacted information discloses when	Public disclosure of this confidential business information could cause harm to Google's users by allowing spammers to identify and respond to

1	<ul style="list-style-type: none"> • Page 4, lines 18, 20 • Page 5, lines 25, 27-28 • Page 19, lines 13-17 	Google implemented structural changes to its email infrastructure. On these dates, Google reorganized the delivery flow sequence in order to improve spam classification and other user services.	changes in Google's systems made to combat spam messages. Disclosure could also cause Google competitive harm, as competitors could use this information to assess how an upgrade to Google's systems affected the features it was able to provide its users, and make corresponding adjustments to their own systems without incurring similar development costs.
6	Lee Exhibit A <ul style="list-style-type: none"> • Page 3, lines 17-19 • Page 19, lines 13-17 	These passages describe how emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	Disclosure of this detailed, proprietary information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
15	Lee Exhibit A <ul style="list-style-type: none"> • Page 3, lines 21-23 • Page 4, lines 1-2, 7, 9, 10, 14, 16, 20-22, 24-26 • Page 5, lines 3, 7, 10-15, 17, 21, 23 • Page 6, lines 5-6, 8, 12 • Page 8, lines 10-12 • Page 19, lines 21, 23-25, 27-28 	These passages describe the functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Because speed and efficiency are key to Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
21	Lee Exhibit A <ul style="list-style-type: none"> • Page 11, lines 13-17 	These passages describe which information about its systems and users' activities Google creates records of, where this information is stored, and how long Google maintains these records. This indicates which information Google considers important to monitor in maintaining its systems, and how Google organizes and stores this information.	Disclosure of this confidential information would alert competitors to the types of information that Google deems worthwhile to record and allow them to narrow their own recording processes in competing products, thus causing Google competitive harm.
28	Lee Exhibit A	These passages describe	Disclosure of this confidential

1	<ul style="list-style-type: none"> • Page 5, line 21 • Page 6, lines 5-6, 8 	Google's methods for efficiently storing email information, and suggest how user activity affects the preservation of certain data. This shows how Google organizes and stores this information to minimize unnecessary retention of data and to offer users the greatest possible amount of storage space for their accounts.	information would alert competitors to Google's data storage techniques, which were developed at significant cost and over a long period of time. This would permit competitors to use these same processes in competing products without undertaking similar development burdens, causing Google competitive harm.
2	Lee Exhibit B <ul style="list-style-type: none"> • Page 17, line 25 • Page 18, lines 1-6, 8-11 • Page 19, lines 4-7, 10-18 • Page 20, lines 3-6, 8 • Page 68, lines 8-9, 11-12, 14 • Page 75, lines 19-20, 23-25 • Page 76, line 1 	These passages reveal which servers and sub-processes play a role in the overall Gmail delivery process.	Disclosure of this confidential information would alert competitors to the types of processes that Gmail performs during the email delivery process, depriving Google of a competitive advantage it has gained through its innovative structuring of the email delivery process.
3			
4			
5			
6			
7	Lee Exhibit B <ul style="list-style-type: none"> • Page 16, lines 3-5, 8, 12, 14-15, 17-18, 20, 24-25 • Page 17, line 4 • Page 21, lines 15-23, 25 • Page 22, lines 8-9, 11-13, 20, 22, 24-25 • Page 23, lines 1-9, 11-13 • Page 28, lines 2-9, 18 • Page 29, line 10 • Page 37, lines 1-6, 12-19, 23-25 • Page 38, lines 1-4, 6-7, 10-13, 15-16, 19-24 • Page 39, lines 1-4, 8-11, 15-16, 20-24 • Page 40, lines 4-6, 9-18, 20-21, 23-25 • Page 42, lines 1-2, 4-7 • Page 43, lines 14-15, 17-21, 23-25 • Page 44, lines 1-4, 7-15 	These passages describe how emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	Disclosure of this detailed, proprietary information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			

1	<ul style="list-style-type: none"> • Page 50, lines 22-25 		
2	<ul style="list-style-type: none"> • Page 53, lines 3-4, 6-13 		
3	<ul style="list-style-type: none"> • Page 65, lines 1, 3-8, 10-11, 13-15, 17-19, 21-25 		
4	<ul style="list-style-type: none"> • Page 66, lines 1-6 		
5	<ul style="list-style-type: none"> • Page 67, lines 3-4, 7-12, 23-25 		
6	<ul style="list-style-type: none"> • Page 68, lines 1-7, 20-23, 25 		
7	<ul style="list-style-type: none"> • Page 73, lines 1, 5-11, 16, 19-20 		
8	<ul style="list-style-type: none"> • Page 74, lines 24-25 		
9	<ul style="list-style-type: none"> • Page 75, lines 16-17, 19-20 		
10	<ul style="list-style-type: none"> • Page 76, lines 1, 3-4, 19-21, 24-25 		
11	<ul style="list-style-type: none"> • Page 77, lines 1-2 		
12	<p>Lee Exhibit B</p> <ul style="list-style-type: none"> • Page 41, lines 1-3, 5-7, 16-18, 21-24 	These passages describe the functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Because speed and efficiency are key to Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
13	<ul style="list-style-type: none"> • Page 42, lines 8-9, 12-16, 19-24 		
14	<ul style="list-style-type: none"> • Page 43, lines 3-11 		
15	<ul style="list-style-type: none"> • Page 44, lines 16, 18, 20-25 		
16	<ul style="list-style-type: none"> • Page 45, lines 1-2, 4-8, 10, 12-19, 21-22, 24-25 		
17	<ul style="list-style-type: none"> • Page 50, lines 1-3, 5-6, 9-10, 15 		
18	<ul style="list-style-type: none"> • Page 53, lines 15-18, 20-25 		
19	<ul style="list-style-type: none"> • Page 54, lines 1, 3-4, 7-8, 10-13 		
20	<ul style="list-style-type: none"> • Page 55, lines 24-25 		
21	<ul style="list-style-type: none"> • Page 77, lines 11, 13, 18, 19 		
22	<p>Lee Exhibit B</p> <ul style="list-style-type: none"> • Page 54, lines 15, 17-18, 20, 22-25 	These passages identify changes or improvements Google has made to its infrastructure and delivery processes, and/or changes that Google intends to implement in the near future. These passages explain how these changes enhance the Gmail system and benefit users.	Public disclosure of this confidential business information could cause harm to Google's users by allowing spammers to identify and respond to changes in Google's systems made to combat spam messages. Disclosure could also cause Google competitive harm, as competitors could use this information to assess how an upgrade to Google's systems affected the features it was able to provide its users, and make corresponding adjustments to their own systems without incurring
23	<ul style="list-style-type: none"> • Page 55, lines 1-4, 8-12, 17-18, 20-21 		
24	<ul style="list-style-type: none"> • Page 65, lines 21-25 		
25	<ul style="list-style-type: none"> • Page 66, lines 1-6, 11-14, 16-19, 24 		
26	<ul style="list-style-type: none"> • Page 67, lines 7-12 		
27			
28			

1			similar development costs.
2	Lee Exhibit C	These passages reveal the	Disclosure of this confidential and
3	• Page 12, lines 10-12	number of Google Apps	proprietary business information would
4	• Page 13, line 17	customers or accounts and	cause Google competitive harm because
5	• Page 14, lines 19-27	the number of Gmail users,	its competitors could use this
6	• Page 15, lines 13-20	broken down by year.	information to enhance their own
7	Lee Exhibit C	These passages, when read in	business plans and market forecasts.
8	• Page 15, lines 23-24	context with the unredacted	Disclosure of this detailed, proprietary
9	• Page 17, lines 11-12,	portions of the document,	information revealing the sequence in
10	• Page 23, lines 13-18, 22, 24, 27-28	reveal how emails flow	which Google implements its Gmail
11	• Page 28, line 19	through the Gmail system,	processes could harm Google by giving
12	• Page 29, line 1, 17-20	including specific details	third parties a roadmap to how these
13		about the sequencing process	emails are routed through the Gmail
14		that Gmail designed through	system for processing and delivery. A
15		years of engineering work	competitor could use this information to
16		and experimentation to	develop competing products featuring a
17		maximize speed and	similarly quick and efficient email flow.
18		efficiency.	Potential hackers and spammers armed
19	Lee Exhibit C		with this confidential information
20	• Page 15, line 28		explaining how Gmail messages travel
21	• Page 16, lines 5, 9-10, 17		through the system could use this
22			knowledge to enhance their attempts to
23			bypass Google's virus detection and
24			spam filtering functions to reach the
25			inboxes of Gmail users.
26	Lee Exhibit C	This is a description	Disclosure of this confidential
27	• Page 15, line 28	indicating that Google has	information would enable competitors
28	• Page 16, lines 5, 9-10, 17	dedicated a specific server or	to copy Google's innovation without
		piece of infrastructure to a	incurring the costs of developing their
		particular task. This is an	own processes, thus depriving Google
		innovation Google developed	of a competitive advantage.
		to make a specific aspect of	
		the Gmail system more	
		efficient.	
	Lee Exhibit C	These passages describe the	Because speed and efficiency are key to
	• Page 17, lines 27-28	functions of specific pieces	Gmail's success, disclosure of
	• Page 18, lines 1-8, 13-14, 17-23, 25-28	of Gmail infrastructure and	confidential information revealing how
	• Page 19, lines 1-9, 11-18, 20, 24-28	their relationship to one	Google constructs its Gmail
	• Page 20, lines 5, 15, 18, 23-24, 26-28	another. These systems have	infrastructure to optimize its systems'
	• Page 21, lines 1-2, 4, 7, 14, 20, 22-28	been placed in relation to one	effectiveness would cause Google harm
	• Page 22, lines 6, 8-15, 17-25	another in a way that Google	by permitting competitors to emulate
	• Page 23, lines 1-8, 11-12	developed to make its Gmail	Google's innovations.
	• Page 24, lines 2-11,	system as efficient as	
		possible.	

1	14-17, 21-25		
2	• Page 25, lines 1-8, 15-19, 28		
3	• Page 26, lines 1-6, 9-26		
4	• Page 30, lines 10- 19, 22-24		
5	• Page 32, lines 1-2		
6	Lee Exhibit C	These passages describe	The location and interaction of scanning
7	• Page 18, lines 13- 14, 17-23	where in the Gmail	systems would give third parties insight
8	• Page 19, lines 5-6, 13-16	infrastructure specific	into how Google is able to quickly and
9	• Page 20, lines 5, 15, 18, 23-24, 26- 28	scanning processes take	efficiently process and deliver messages
10	• Page 21, lines 2, 4, 7, 14, 20, 22-28	place. These processes have	to its users; as a result, disclosure of this
11	• Page 22, lines 1-3	been deliberately placed in	confidential information would harm
12	• Page 30, lines 24, 28	these locations to maximize	Google by giving competitors an unfair
13	• Page 31, lines 1-9, 11-21	the speed and efficiency of	opportunity to copy Google's system
14		the Gmail system.	and deprive Google of a competitive
15	Lee Exhibit C		advantage.
16	• Page 22, lines 3-5	These passages identify	
17	• Page 26, lines 9-13, 20-26	improvements Google has	Public disclosure of this confidential
18		made to its infrastructure and	business information could cause
19		processes, and/or changes	Google competitive harm, as
20		that Google intends to	competitors could use this information
21		implement in the near future.	to assess how an upgrade to Google's
22		These passages explain how	systems affected the features it was able
23		these changes enhance the	to provide its users, and make
24		Gmail system and benefit	corresponding adjustments to their own
25		users.	systems without incurring similar
26	Lee Exhibit C		development costs.
27	• Page 23, lines 25- 26	These passages describe	
28	• Page 29, lines 17- 18, 21-28	which information about its	Disclosure of this confidential
	• Page 30, lines 4-5	systems and users' activities	information would alert competitors to
	• Page 31, lines 25- 28	Google creates records of,	the types of information that Google
		where this information is	deems worthwhile to record and allow
		stored, and how long Google	them to narrow their own recording
		maintains these records. This	processes in competing products, thus
		indicates which information	causing Google competitive harm.
		Google considers important	
		to monitor in maintaining its	
		systems, and how Google	
		organizes and stores this	
		information.	
	Lee Exhibit D ¹	These passages describe	Disclosure of this confidential

¹ In *Dunbar*, this Court has already sealed significant portions of Rommel Exhibit D, the deposition of Thompson Gawley. (ECF Nos. 290, 292.) The Court has already reviewed and approved Google's limited redactions on the following pages: 8, 15-16, 82-90, 97, 100-106, 159, 175-178, 191-223, 225, and 227-228. To facilitate the Court's review, I discuss only pages that have not yet been reviewed and sealed, and do not repeat Google's justifications for sealing the already-sealed portions of Rommel Exhibit D.

1	<ul style="list-style-type: none"> • Page 29, lines 9, 14, 17, 23, 25 	which information about its systems and users' activities	information would alert competitors to
2	<ul style="list-style-type: none"> • Page 45, lines 3-4, 6, 9, 11, 13-14, 17, 19-20, 24 	Google creates records of, where this information is stored, and how long Google maintains these records. This indicates which information Google considers important to monitor in maintaining its systems, and how Google organizes and stores this information.	the types of information that Google deems worthwhile to record and allow them to narrow their own recording processes in competing products, thus causing Google competitive harm.
3	<ul style="list-style-type: none"> • Page 46, lines 3-4, 12-13, 22-23, 25 		
4	<ul style="list-style-type: none"> • Page 70, lines 9-10 		
5	<ul style="list-style-type: none"> • Page 122, lines 1-2, 5-7 		
6	<ul style="list-style-type: none"> • Page 123, lines 9-12, 14, 17, 24-25 		
7	<ul style="list-style-type: none"> • Page 124, lines 1-2, 4-6, 9-10, 12-13, 15-16, 18-19, 24 		
8	<ul style="list-style-type: none"> • Page 125, lines 1, 3, 5, 10-11, 14-15, 21-22, 24 		
9	<ul style="list-style-type: none"> • Page 136, lines 19-21, 23-24 		
10	<ul style="list-style-type: none"> • Page 148, lines 1-4, 12, 14-15, 17-20, 23 		
11	<ul style="list-style-type: none"> • Page 149, lines 1, 23-24 		
12	<ul style="list-style-type: none"> • Page 150, lines 3-4 		
13			
14	<p>Lee Exhibit D</p> <ul style="list-style-type: none"> • Page 37, lines 11, 15, 17, 19, 22-23 	These passages describe the functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Because speed and efficiency are key to Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
15	<ul style="list-style-type: none"> • Page 38, lines 1, 6, 13 		
16	<ul style="list-style-type: none"> • Page 39, lines 4-6, 23-24 		
17	<ul style="list-style-type: none"> • Page 40, lines 18-20 		
18	<ul style="list-style-type: none"> • Page 45, lines 3-4, 6, 9, 11, 13-14, 17, 19-20, 24 		
19	<ul style="list-style-type: none"> • Page 77, lines 3-6 		
20	<ul style="list-style-type: none"> • Page 150, lines 9-11, 16-17, 20-21 		
21			
22	<p>Lee Exhibit D</p> <ul style="list-style-type: none"> • Page 133, lines 5-11, 16 	These passages describe how emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	Disclosure of this detailed, proprietary information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this
23	<ul style="list-style-type: none"> • Page 134, lines 2-3, 15 		
24			
25			
26			
27			
28			

1			knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
2			
3	Lee Exhibit D	These passages describe	Disclosure of this confidential
4	• Page 117, lines 1-4,	which information about its	information would alert competitors to
5	12, 16, 21-24	systems and activities Google	the types of information that Google
6		creates records of, and which	deems worthwhile to record and allow
7		information it does not	them to narrow their own recording
8		record. This indicates which	processes in competing products, thus
9		information Google	causing Google competitive harm.
10		considers important to	
11		monitor in further developing	
12		its systems.	
13	Lee Exhibit E	These passages describe the	Because speed and efficiency are key to
14	• Page 206, lines 9,	functions of specific pieces	Gmail's success, disclosure of
15	13, 21-22	of Gmail infrastructure and	confidential information revealing how
16	• Page 207, lines 1-2	their relationship to one	Google constructs its Gmail
17	• Page 217, lines 24-	another. These systems have	infrastructure to optimize its systems'
18	25	been placed in relation to one	effectiveness would cause Google harm
19	• Page 218, lines 1,	another in a way that Google	by permitting competitors to emulate
20	6-7	developed to make its Gmail	Google's innovations.
21	• Page 219, lines 1-2,	system as efficient as	
22	7, 12, 18, 20	possible.	
23	• Page 220, line 6		
24	Lee Exhibit E	These passages describe how	Disclosure of this detailed, proprietary
25	• Page 207, lines 9-	emails flow through the	information revealing the sequence in
26	10, 16-18, 23-25	Gmail system, including	which Google implements its Gmail
27	• Page 298, lines 21-	specific details about the	processes could harm Google by giving
28	22	sequencing process that	third parties a roadmap to how these
	• Page 305, lines 1,	Gmail designed through	emails are routed through the Gmail
	13, 21	years of engineering work	system for processing and delivery. A
	• Page 306, lines 7,	and experimentation to	competitor could use this information to
	19	maximize speed and	develop competing products featuring a
	• Page 308, lines 16-	efficiency.	similarly quick and efficient email flow.
	18		Potential hackers and spammers armed
	• Page 310, lines 11-		with this confidential information
	12, 16-17		explaining how Gmail messages travel
	• Page 311, lines 19-		through the system could use this
	21		knowledge to enhance their attempts to
	• Page 312, lines 8-		bypass Google's virus detection and
	11, 21, 25		spam filtering functions to reach the
	• Page 313, lines 1-2,		inboxes of Gmail users.
	10-12, 22-25		
	• Page 314, lines 4-9,		
	12-16, 20-21		
	• Page 315, lines 2-4,		
	6-10, 13-14		
	• Page 316, lines 15,		
	20-24		
	• Page 317, lines 7-		
	10, 24-25		
	• Page 318, lines 6-7,		
	19-20		

1	<ul style="list-style-type: none"> • Page 319, lines 9-10 		
2	Lee Exhibit E <ul style="list-style-type: none"> • Page 207, lines 9-10, 23-25 • Page 208, line 1 • Page 218, lines 13, 23 • Page 219, lines 1-2 • Page 220, line 2 	These passages identify changes or improvements Google has made to its infrastructure and processes, and/or changes that Google intends to implement in the near future. These passages explain how these changes enhance the Gmail system and benefit users.	Public disclosure of this confidential business information could cause harm to Google's users by allowing spammers to identify and respond to changes in Google's systems made to combat spam messages. Disclosure could also cause Google competitive harm, as competitors could use this information to assess how an upgrade to Google's systems affected the features it was able to provide its users, and make corresponding adjustments to their own systems without incurring similar development costs.
9	Lee Exhibit F <ul style="list-style-type: none"> • Pages 9-14, 17, 19, 27-29 	These passages describe how emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	Disclosure of this detailed, proprietary information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
18	Lee Exhibit F <ul style="list-style-type: none"> • Pages 10-11, 27-28 	These passages describe a Google innovation in the storage of email metadata. This method was designed to store data as efficiently as possible and allow Google to maximize the amount of storage it offers to its users.	Because the amount of storage space Google is able to offer is a key competitive advantage, disclosure of confidential information related to how Google manages its storage of emails and metadata would cause Google harm by permitting competitors to emulate Google's innovations.
22	Lee Exhibit F <ul style="list-style-type: none"> • Pages 19, 27-29 	These passages describe the functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Because speed and efficiency are key to Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
27	Lee Exhibit G <ul style="list-style-type: none"> • Pages 1-2 	These are descriptions of the email information Google	If a competitor had access to the specific information Google scans for,

1		scans for in order to provide services to Gmail users. Google's selection of which information to use is tailored to allow Google to provide numerous features without slowing the Gmail system by running email through unnecessary processes.	as well as the information that Google has chosen to not scan for in an effort to streamline its system, that competitor could use this knowledge to create or enhance a competing product. As a result, disclosure of this proprietary and confidential information would harm Google.
2	Lee Exhibit G	These passages describe the functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Because speed and efficiency are key to Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
3	• Pages 1-2		
4	Lee Exhibit G	This is a description of particular user behavior that Google views as significant in helping determine which emails users find significant. This information can be used to, among other things, help users sort their emails in order of importance, and to identify spam email.	Because this confidential information describes the significant user behavior Google uses to provide innovative email services, disclosure of this information would cause Google harm by allowing competitors to identify and use this information in their own products.
5	• Page 2		
6	Lee Exhibit H	Lee Exhibit H is the Google Apps Partners agreement between Google and Cable One. On December 12, 2012, the Court granted Google's motion to seal the page titled "Amendment Number One to Google Apps Partner Edition Agreement" in its entirety because it contained confidentiality negotiated terms, such as price per user, number of accounts to be provided, payment schedule, and bank account information. (Order, ECF No. 227, at 8.) Although Plaintiffs seek to seal the entire contract, Google has proposed limited redactions to protect only those highly confidential terms, in accordance with the Court's December ruling.	Disclosure of this confidential information would result in competitive harm to Google because potential Google Apps partners could use this information against Google in future contract negotiations, and Google's competitors could use this information to compete with Google for the business of potential Google partners.
7	• Pages 2, 5, 8, 10, 12		
8	Lee Exhibit I	These passages describe the	Disclosure of particular terms and

1	• Page 10, lines 8-9	confidential terms of an agreement between Cable One and Google.	agreements between Google and Cable One would cause Google harm by informing Google's competitors and potential partners what terms Google has been willing to accept and thus harming Google's position in negotiations.
2	Lee Exhibit J ²		
3	• Pages 8-12, 15-16	These passages describe where in the Gmail infrastructure specific scanning processes take place. These processes have been deliberately placed in these locations to maximize the speed and efficiency of the Gmail system.	The location and interaction of scanning systems would give third parties insight into how Google is able to quickly and efficiently process and deliver messages to its users; as a result, disclosure of this confidential information would harm Google by giving competitors an unfair opportunity to copy Google's system and deprive Google of a competitive advantage.
4	Lee Exhibit J		
5	• Pages 8-13, 16	These passages describe how emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	Disclosure of this detailed, proprietary information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
6	Lee Exhibit J		
7	• Pages 8, 16	These passages describe how Gmail's email flow sequencing and task structure has changed over time, implementing Google engineers' innovations discovered through trial and error in order to improve the efficiency and utility of the Gmail system	Disclosure of this confidential information would enable competitors to copy Google's innovation without incurring the costs of developing their own processes, thus depriving Google of a competitive advantage.
8	Lee Exhibit J		
9	• Pages 9-13, 17-18, 25-27	These passages describe which information about its systems and users' activities Google creates records of,	Disclosure of this confidential information would alert competitors to the types of information that Google deems worthwhile to record and allow

² Google's Second Supplemental Responses and Objections to Plaintiff Debra L. Marquis' First Set of Interrogatories was sealed with Google's proposed limited redactions by the *Dunbar* Court. (*Dunbar* ECF No. 292.) The redactions proposed for Exhibit J, Google's First Supplemental Responses and Objections, conform to the now-sealed Second Supplemental Responses.

1		where this information is stored, and how user activity affects the preservation of this data. This indicates which information Google considers important to monitor in maintaining its systems, and how Google organizes and stores this information.	them to narrow their own recording processes in competing products, thus causing Google competitive harm.
2			
3			
4			
5			
6	Lee Exhibit K	These passages describe	The location and interaction of scanning
7	• Pages 9-10, 15, 18-20, 22-23, 26	where in the Gmail infrastructure specific scanning processes take place. These processes have been deliberately placed in these locations to maximize the speed and efficiency of the Gmail system.	systems would give third parties insight into how Google is able to quickly and efficiently process and deliver messages to its users; as a result, disclosure of this confidential information would harm Google by giving competitors an unfair opportunity to copy Google's system and deprive Google of a competitive advantage.
8			
9			
10			
11	Lee Exhibit L	These passages describe the	Because speed and efficiency are key to
12	• Page 6, lines 13-22, 24-26	functions of specific pieces of Gmail infrastructure and their relationship to one another. These systems have been placed in relation to one another in a way that Google developed to make its Gmail system as efficient as possible.	Gmail's success, disclosure of confidential information revealing how Google constructs its Gmail infrastructure to optimize its systems' effectiveness would cause Google harm by permitting competitors to emulate Google's innovations.
13	• Page 7, lines 1-8, 12-13, 17-24, 26		
14	• Page 8, lines 4-15		
15	• Page 12, lines 28		
16	• Page 13, lines 1-7, 12, 17		
17	• Page 14, lines 1, 3, 7, 10-11, 14-28		
18	• Page 15, lines 1-11, 15-18, 26, 28		
19	• Page 16, line 1		
20	Lee Exhibit L	These passages describe how	Disclosure of this detailed, proprietary
21	• Page 7, lines 17-24, 28	emails flow through the Gmail system, including specific details about the sequencing process that Gmail designed through years of engineering work and experimentation to maximize speed and efficiency.	information revealing the sequence in which Google implements its Gmail processes could harm Google by giving third parties a roadmap to how these emails are routed through the Gmail system for processing and delivery. A competitor could use this information to develop competing products featuring a similarly quick and efficient email flow. Potential hackers and spammers armed with this confidential information explaining how Gmail messages travel through the system could use this knowledge to enhance their attempts to bypass Google's virus detection and spam filtering functions to reach the inboxes of Gmail users.
22	• Page 8, lines 1, 4-15, 17-24		
23	• Page 12, lines 15, 18-21, 23-25		
24			
25			
26			
27	Lee Exhibit L	These passages describe	Disclosure of this confidential
28			

<ul style="list-style-type: none"> • Page 6, lines 27-28 • Page 7, lines 25-26 • Page 8, lines 26-28 • Page 9, lines 1-4 	which information about its systems and activities Google creates records of, and which information it does not record. This indicates which information Google considers important to monitor in further developing its systems.	information would alert competitors to the types of information that Google deems worthwhile to record and allow them to narrow their own recording processes in competing products, thus causing Google competitive harm.
--	---	--

26. All of the above information relates to internal information, proprietary processes, or business decision-making within Google that is confidential and highly sensitive in nature. Google's users benefit from the confidentiality of this information because confidentiality protects their security and permits Google to provide innovative features in a competitive market for email services. Google also derives economic benefit from the confidentiality of this information, which reflects the specific information that Google uses and evaluates in connection with its Gmail and Google Apps systems. Google does not disclose this information to its competitors, customers, or the general public. Public disclosure of this information would cause Google significant harm by giving third parties insight into confidential and sensitive aspects of Google's internal operations, and could harm users by giving hackers or spammers insight into the protections Google provides against those individuals. For these reasons, Google respectfully requests that this motion be granted, and that the Court seal information as requested above.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on October 29, 2013, in Mountain View, California.

/s/ Han Lee

Han Lee

FILER'S ATTESTATION

Pursuant to Local Rule 5-1(i)(3), I attest under penalty of perjury that concurrence in the filing of this document has been obtained from its signatory.

Dated: October 29, 2013

COOLEY LLP
MICHAEL G. RHODES (116127)
WHITTY SOMVICHIAN (194463)
KYLE C. WONG (224021)

/s/ Whitty Somvichian
Whitty Somvichian (194463)
Attorneys for Defendant
GOOGLE INC.