PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4070910

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| JEFFREY A. DEAN | 06/10/2013 |

RECEIVING PARTY DATA

| Name: | Google Inc. |
|-----------------|---------------------------|
| Street Address: | 1600 Amphitheatre Parkway |
| City: | Mountain View |
| State/Country: | CALIFORNIA |
| Postal Code: | 94043 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15277306 |

CORRESPONDENCE DATA

Fax Number: (877)769-7945

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (650) 839-5070 **Email:** apsi@fr.com

Correspondent Name: MICHAEL P. SHEPHERD Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

| ATTORNEY DOCKET NUMBER: | 16113-4688002 | |
|-------------------------|--------------------|--|
| NAME OF SUBMITTER: | CHRISTINE ROGERS | |
| SIGNATURE: | /Christine Rogers/ | |
| DATE SIGNED: | 09/27/2016 | |

Total Attachments: 1

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PATENT 504024251 REEL: 039867 FRAME: 0847

Attorney's Docket No.: 16113-4688001 Page 1 of 1

<u>ASSIGNMENT</u>

For valuable consideration, I, Jeffrey A. Dean of Palo Alto, California, hereby assign to Google Inc., a corporation organized under the laws of Delaware having a place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043, and its successors and assigns (collectively, "the Assignee"), my entire right, title and interest throughout the world in the inventions and improvements which are the subject or subjects of a patent application naming me as inventor(s), with United States application or PCT international application number 13/928, 939 and a filing date of 06/27/2013 . I authorize and request the attorneys appointed in the said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known. This assignment includes said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and I agree for myself and my respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, preliminary statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

| Dated: Jun 10, 2013 | Jeff Dean (Jun 10, 2013) |
|---------------------|--------------------------|
| | Jeffrey A. Dean |

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RECORDED: 09/27/2016