502195919 01/15/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| John RALEY | 01/10/2013 |
| Ethan SOLOMITA | 01/10/2013 |

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: | 13739987 |

CORRESPONDENCE DATA

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Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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| ATTORNEY DOCKET NUMBER: | 090364-0640 |
|-------------------------|-------------|
|-------------------------|-------------|

| NAME OF SUBMITTER: | Andrew D. Mickelsen, Reg. No. 50,957 |
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Total Attachments: 3

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PATENT REEL: 029633 FRAME: 0427

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ASSIGNMENT

For valuable consideration, we, John RALEY of 324 Caselli Avenue, San Francisco, CA 94114 and Ethan SOLOMITA of 1359 Church Street, San Francisco, CA 94144, hereby assign to: Google Inc., a corporation of Delaware having a place of business at: 1600 Amphitheatre Parkway, Mountain View, California 94043; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled METHOD AND SYSTEM FOR INCREMENTAL CACHE LOOKUP AND INSERTION, filed January 11, 2013, and assigned U.S. Application Number 13/739,987, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including 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; and we authorize the Assignee to apply in all countries in our 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 we agree for ourselves and our 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.

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Attorney Docket No. 090364-0640

John RALEY

Witnessed by:

Signature

Typed or Printed Name

Witness Address

Attorney Docket No. 090364-0640

| Date: 1/10/13 | 2636 |
|-----------------------|----------------|
| | Ethan SOLOMITA |
| Witnessed by: | |
| | • |
| Signature | |
| Typed or Printed Name | |
| | |
| Witness Address | |

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