### 504449570 07/10/2017

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JONATHAN HUANG	06/27/2017
JOSEPH LAPENNA	06/27/2017
ALEXANDER SCHIFFHAUER	06/27/2017
ALEX ZHENG	07/10/2017

#### **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:	15645423

## **CORRESPONDENCE DATA**

Fax Number:

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.

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ATTORNEY DOCKET NUMBER: GP-201900-00-US

NAME OF SUBMITTER: CHRISTOPHER J. RECKAMP

SIGNATURE: /CHRISTOPHER J. RECKAMP/

DATE SIGNED: 07/10/2017

**Total Attachments: 6** 

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PATENT 504449570 REEL: 042954 FRAME: 0861

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PATENT REEL: 042954 FRAME: 0862

#### ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, Jonathan Huang, Sunnyvale, California, Joseph LaPenna, San Francisco, California, Alexander Schiffhauer, Mountain View, California, and Alex Zheng, Millbrae, California, have sold, assigned and transferred, and do hereby sell, assign and transfer, unto GOOGLE INC., a Corporation of the State of Delaware, having its principal office in Mountain View, State of California, United States of America, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions entitled "METHOD, APPARATUS AND SYSTEM FOR PROVIDING WIRELESS NETWORK SPEED INFORMATION" as described, illustrated and claimed in the following applications:

U.S. Application No. 15/645,423, filed on July 10, 2017, entitled: "METHOD, APPARATUS AND SYSTEM FOR PROVIDING WIRELESS NETWORK SPEED INFORMATION"

We hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to the invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of the invention and the applications for Letters Patent in foreign countries, and we further authorize Assignee to apply for Letters Patent in foreign countries directly in its own name, and to claim priority of the filing date of the application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

We hereby also sell, assign and transfer unto Assignee, the entire right, title and interest in and to other applications for Letters Patent on the inventions referenced in this Assignment and Agreement, and all rights, title and interest in and to all applications for Letters Patent in respect of the invention filed under any and all international conventions and treaties together with the entire right, title and interest in and to Letters Patent which may be issued upon the application(s) or any application(s) otherwise claiming priority thereto, and upon any divisions, extensions, continuations, reissues and/or re-examinations of such application(s).

We further authorize Assignee to apply for Letters Patent directly in its own name where applicable, and to claim priority of the filing date of the application for Letters

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PATENT REEL: 042954 FRAME: 0863 Patent filed under the laws of the applicable country and under the provisions of any and all international conventions and treaties.

We hereby authorize Assignee to request the Commissioner of Patents of the United States of America to issue any Letters Patents upon the aforesaid application, divisions, extensions, continuations, reissues or re-examinations, to Assignee, for the sole use and benefit of Assignee, to the full end of the term for which Letters Patent may be granted, the same as they would have been held and enjoyed by me had this assignment not been made, and we hereby authorize Assignee to request the equivalent authorities in foreign countries to issue the patents of their respective countries to Assignee.

We hereby authorize Assignee, its successors and assigns, its legal representatives, or anyone the Assignee may properly designate, to insert in this Assignment of Patent Rights the filing date and/or application number of the Application when ascertained.

We agree that, when requested, we will, without charge to Assignee, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing, maintaining and enforcing patents for the inventions in any and all countries and for vesting title thereto in Assignee.

We covenant with Assignee that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

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JONATHAN HUANG	DATE:
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	-

JOSEPH LAPENNA	DATE:
Witness One	
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Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	

ALEXANDER SCHIFFHAUER	DATE:
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	-

ALEX ZHENG	DATE:
Witness One	
Witness One Signature	Date
Printed Name of Witness One	
Witness Two	
Witness Two Signature	Date
Printed Name of Witness Two	

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RECORDED: 07/10/2017

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