504129104 12/08/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4175775 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHANGZHAN GU	12/06/2016
ZHIBIN ZHANG	12/06/2016
TONY ONG	12/06/2016

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:	15372576

CORRESPONDENCE DATA

Fax Number: (248) 566 - 8437

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.

248-566-8470 Phone:

Email: odudley@honigman.com

HONIGMAN MILLER SCHWARTZ AND COHN LLP GO **Correspondent Name:**

Address Line 1: DOCKETING DEPARTMENT

Address Line 2: 350 EAST MICHIGAN AVENUE SUITE 300 Address Line 4: KALAMAZOO, MICHIGAN 49007-3800

ATTORNEY DOCKET NUMBER: 231441-404246 **NAME OF SUBMITTER:** BRETT A. KRUEGER SIGNATURE: /Brett A. Krueger/ **DATE SIGNED:** 12/08/2016

Total Attachments: 2

source=Assignment#page1.tif source=Assignment#page2.tif

> **PATENT REEL: 040596 FRAME: 0976** 504129104

ASSIGNMENT

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, Changzhan Gu residing in Milpitas, CA and having a mailing address at 1600 Amphitheatre Parkway, Mountain View, California 94043, Zhibin Zhang residing in Hayward, CA and having a mailing address at 1600 Amphitheatre Parkway, Mountain View, California 94043 and Tony Ong residing in San Jose, CA and having a mailing address at 1600 Amphitheatre Parkway, Mountain View, California 94043 hereby assign to: Google Inc., a corporation of <u>Delaware</u> having a place of business at: <u>1600 Amphitheatre Parkway</u>, <u>Mountain</u> View, California 94043; and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest, including the right to sue for past infringement, throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by me, entitled NON-INVASIVE BEAM STEERING, filed December 8, 2016, and assigned U.S. Serial Number 15/372,576, 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 names 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.

Attorney Docket No: 231441-404246

Mangzhan GU

5A17F70846014B1

Changzhan Gu

DocuSigned by:

Zhibin Zhang

-DocuSigned by:

Tony Ong

Tony Ong

Page 2 of 2

23214720.1

RECORDED: 12/08/2016