505653290 09/04/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Stylesheet Version v1.2

EPAS ID: PAT5700096

NATURE OF CONVEYANCE: Corrective Assignment to correct the INCORRECTLY SUBMITTED ASSIGNMENT FROM GOOGLE INC TO GOOGLE INC. previously recorded on Reel 050030 Frame 0729. Assignor(s) hereby confirms the ASSIGNMENT.	SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT		
	NATURE OF CONVEYANCE:	ASSIGNMENT FROM GOOGLE INC TO GOOGLE INC. previously recorded on Reel 050030 Frame 0729. Assignor(s) hereby confirms the		

CONVEYING PARTY DATA

Name	Execution Date
Masoud Mohseni	12/22/2014
Hartmut Neven	12/30/2014

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:	16450461		

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: (202) 626-7780

Email: apsi@fr.com, mso@fr.com
Correspondent Name: SARAH HARRISON-SCHMIDT
Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	16113-5323002
NAME OF SUBMITTER:	MATTHEW O'BRIEN
SIGNATURE:	/Matthew O'Brien/
DATE SIGNED:	09/04/2019

Total Attachments: 3

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PATENT 505653290 REEL: 050262 FRAME: 0407

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PATENT REEL: 050262 FRAME: 0408

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5664554

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Masoud Mohseni	12/22/2014
Hartmut Neven	12/30/2014

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:	16450461

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: (202) 626-7780

Email: apsi@fr.com, mso@fr.com

Correspondent Name: SARAH HARRISON-SCHMIDT

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	16113-5323002
NAME OF SUBMITTER:	MATTHEW O'BRIEN
SIGNATURE:	/Matthew O'Brien/
DATE SIGNED:	08/12/2019

Total Attachments: 2

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> PATENT REEL: 050262 FRAME: 0409

Attorney's Docket No.: 16113-5323WO1 Page 1 of 2

ASSIGNMENT and CONFIRMATION

We, <u>Masoud Mohseni</u>, and <u>Hartmut Neven</u>, each hereby confirm the assignment and transfer to Google Inc., a Delaware corporation having a place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043, and its successors and assigns (collectively, "ASSIGNEE") of all of our individual and joint right, title and interest throughout the world in and to any and all inventions and improvements that are the subject or subjects of a patent application entitled

CONSTRUCTING AND PROGRAMMING QUANTUM HARDWARE FOR ROBUST QUANTUM ANNEALING PROCESSES

that names us as inventors, which is subject of an international patent application under

the	Patent Cooperation Treaty	(PCT) assigned F	PCT Applica	tion	
No.	PCT/US2014/072959	and filed on _	12/31/2014	1	We
auth	onize and request the attor				assignment by
inse	erting the filing date and ser	ial number of the	application	when known.	The foregoing
ass	ignment and transfer occur	red by operation o	of one or mo	re agreement	ts relating to
our	employment by Google Inc	or an affiliate of	Google Inc.	Should any	of us have any
rem	aining interest, we each he	reby assign and t	ransfer any	right, title or i	nterest we
may	have in the above-mention	ned inventions an	d improvem	ents anywher	e in the world
to A	SSIGNEE.				

This assignment and confirmation includes the foregoing patent application or patent; all legal equivalents thereof in any country and all patents issuing therefrom; all patents, utility models, and design registrations granted for any of said inventions and improvements throughout the world; and the right to claim priority based on the filing date of the foregoing patent application or patent 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. We authorize ASSIGNEE to apply in all countries in our names or in the name of ASSIGNEE for patents, utility

REEL: 050262 FRAME: 0410

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models, and design registrations and like rights of exclusion and for inventors' certificates for the assigned inventions and improvements.

The foregoing assignments have been made for good and valuable consideration, the receipt of which is hereby acknowledged, and in accordance with the employment-related agreements existing at the time the above-mentioned inventions and improvements were made.

We hereby represent and covenant that no assignment, agreement or encumbrance has been or will be made or entered into by us that would conflict with the abovementioned assignment of the inventions and improvements to ASSIGNEE.

We further covenant for ourselves and our respective heirs, legal representatives and assigns to provide to ASSIGNEE promptly upon the request of ASSIGNEE all pertinent facts and documents relating to any of the above-mentioned inventions and improvements, patent applications, patents and legal equivalents, as may be known and accessible to us; to testify as to the same in any interference, litigation, or proceeding relating thereto; and promptly to execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce any of the above-mentioned applications, inventions and improvements, patents and equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Dated:	Dec 22, 2014	MOnon	
•		Masoud Mohseni	
Dated:	Dec 30, 2014		
		Hartmut Neven	
12190358.doc			

RECORDED: 09/04/2019

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