504591669 10/12/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SIDDHARTHA MALLIK	04/15/2011
RENQIU WANG	04/20/2011
RAVI PALANKI	04/15/2011
NAGA BHUSHAN	04/15/2011

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED
Street Address:	5775 MOREHOUSE DRIVE
City:	SAN DIEGO
State/Country:	CALIFORNIA
Postal Code:	92121-1714

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15782355

CORRESPONDENCE DATA

Fax Number: (571)432-0808

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: 8586584351

Email: rallen@harrityllp.com

Correspondent Name: HARRITY & HARRITY, LLP
Address Line 1: 11350 RANDOM HILLS ROAD

Address Line 2: SUITE 600

Address Line 4: FAIRFAX, VIRGINIA 22030

ATTORNEY DOCKET NUMBER:	0097-0379D2/101571D1D1
NAME OF SUBMITTER:	PAUL M. GURZO
SIGNATURE:	/PAUL M. GURZO, Reg. No. 67,478/
DATE SIGNED:	10/12/2017

Total Attachments: 5

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ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to us in hand paid, receipt of which

is hereby acknowledged, be it known that We,

1. Siddhartha Mallik, a citizen of India, having a mailing address of 5775 Morehouse

Drive, San Diego, CA 92121; and a resident of San Diego, CA,

2. Renqiu Wang, a citizen of China P.R., having a mailing address of 5775 Morehouse

Drive, San Diego, CA 92121; and a resident of San Diego, CA,

3. Ravi Palanki, a citizen of India, having a mailing address of 5775 Morehouse Drive,

San Diego, CA 92121; and a resident of San Diego, CA,

4. Naga Bhushan, a citizen of The United States of America, having a mailing address of

5775 Morehouse Drive, San Diego, CA 92121; and a resident of San Diego, CA,

have sold, assigned and transferred and by these presents do sell, assign, transfer and set over

unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at

5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives,

or assigns, the entire right, title and interest in and to a certain invention relating to NETWORK-

ASSISTED PEER DISCOVERY by us devised and the application for United States Patent

therefore filed in the United States Patent and Trademark Office on 04/12/11, and assigned Serial

No. 13/085,306, including Provisional Application Numbers 61/324,606, filed on 04/15/10, and

61/360,705, filed on 07/01/10, and all original and reissue patents granted thereof (in the United

States and any foreign country), and all divisionals, continuations and continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, CA this <u>I 👫</u> day of <u>A</u>	2011.
	' Salil -
•	Sidd h artha Mallik
Done at San Diego, CA this day of	, 2011.
÷	Renqiu Wang
Done at San Diego, CA this day of	, 2011.
	Ravi Palanki
Done at San Diego, CA this day of	, 2011.
-	Naga Bhushan

States and any foreign country), and all divisionals, continuations and continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at San Diego, CA this	day of _	, 2011.	
		Siddhartha Mallik	
Done at San Diego, CA this Z	day of	<u>Λρί , 2011.</u>	
		Rengiu Wang	
Done at San Diego, CA this	day of _	, 2011.	
		Ravi Palanki	njeda na ma na ma ma ma jednjednjednjednikala
Done at San Diego, CA this	day of		
		Naga Bhushan	

States and any foreign country), and all divisionals, continuations and continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

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Done at San Diego, CA this day o	of, 2011.
	Siddhartha Mallik
Done at San Diego, CA this day o	f,2011.
	Renqiu Wang
Done at San Diego, CA this 5 day o	f <u>April</u> , 2011.
	P. Rani
	Ravi Palanki
Done at San Diego, CA this day o	f, 2011.
	Naga Bhushan

States and any foreign country), and all divisionals, continuations and continuations-in-part thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

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		Siddhartha Mallik	
Done at San Diego, CA this	_day of	, 2011.	
		Renqiu Wang	
Done at San Diego, CA this	_day of	, 2011.	
		Ravi Palanki	
Done at San Diego, CA this \(\frac{\lambda 5^{13}}{2}\)	day of _	YPRIL, 2011. IS Naga Bhushama	21
		Naga Bhushan	

PATENT REEL: 043853 FRAME: 0163

RECORDED: 10/12/2017