# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XIAOCHUN ZHU	01/06/2014
STEVEN M. MILLENDORF	01/06/2014
XU GUO	01/03/2014
DAVID M. JACOBSON	01/06/2014
KANGHO LEE	01/07/2014
SEUNG H. KANG	01/07/2014
MATTHEW MICHAEL NOWAK	01/07/2014

## **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:	14072634

# **CORRESPONDENCE DATA**

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

**Phone:** (949) 681-8161

Email: qualcomm-pto@lozaip.com

Correspondent Name: LOZA & LOZA, LLP/QUALCOMM
Address Line 1: 305 N. SECOND AVE., #127
Address Line 4: UPLAND, CALIFORNIA 91786

ATTORNEY DOCKET NUMBER:	QCOM-2281US (133248)	
NAME OF SUBMITTER:	JULIO LOZA	
SIGNATURE:	/Julio Loza/	
DATE SIGNED:	04/07/2014	

**Total Attachments: 6** 

PATENT
REEL: 032619 FRAME: 0346

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#### **ASSIGNMENT**

## WHEREAS, WE,

- 1. Xiaochun Zhu, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 2. Steven M. Millendorf, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 3. Xu Guo, a citizen of China, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 4. David M. Jacobson, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 5. Kangho Lee, a citizen of Korea, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 6. Seung H. Kang, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,
- 7. Matthew Michael Nowak, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, California,

have conceived of one or more processes, methods, machines, articles of manufacture, designs, compositions of matter, inventions, discoveries or new or useful improvements relating to PHYSICALLY UNCLONABLE FUNCTION BASED ON THE RANDOM LOGICAL STATE OF MAGNETORESISTIVE RANDOM-ACCESS MEMORY (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated (hereinafter "ASSIGNEE"), a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., desires to acquire or otherwise obtain the entire right, title, and interest in and to said INVENTIONS, including all inventions related thereto or thereof, all patent applications therefor, and all patents that have granted or may be granted hereafter thereon, including but not limited to those identified below.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, WE do hereby acknowledge that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE,

its successors, its legal representatives, and its assigns, the entire right, title, and interest throughout the world in and to said INVENTIONS, including all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in the United States, including but not limited to U.S. Application No. 14/072,634 filed November 5, 2013, Qualcomm Reference No. 133248, and all provisional applications relating thereto, together with U.S. Provisional Application No. 61/875,617, filed September 9, 2013, Qualcomm Reference No. 133248P1, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on	
	LOCATION	, on	Xiaochun Zhu
Done at <u>S</u>	ON DIEGO CA	on Jun 6, 2014 DATE	Steven M. Millendørf
Done at	LOCATION	, on	Xu Guo
Done at	LOCATION	on	David M. Jacobson
Done at	LOCATION	, on	Kangho Lee
Done at	LOCATION	, on	Seung H. Kang
Done at	LOCATION	, on	Matthew Michael Nowak

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, on	
LOCATIO	on N DATE	Xiaochun Zhu
Done at	on DATE  ON DATE  ON JOINT DATE	
LOCATIO	N DATE	Steven M. Millendorf
5775 Moreh	ouse Airl	000
Done at <u>Can Diego</u>	(A), on Jon-3, 2014	222-
LOCATIO	N DATE	Xu Guo
Done at	on ON DATE	
LOCATIO	DATE DATE	David M. Jacobson
Done at	• on	
LOCATIO	DATE	Kangho Lee
Done at	, on	
LOCATIO	ON DATE	Seung H. Kang
Done at	on	
LOCATIO	N DATE	Matthew Michael Nowak

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on	
	LOCATION	DATE	Xiaochun Zhu
Done at		, on	Steven M. Millendorf
	LOCATION	DATE	Steven M. Millendorf
Done at		_, on	Xu Guo
	LOCATION	DATE	Xu Guo
Done at _S	en Diego	, on 1/6/201	David M. Jacobson
	LOCATION	DATE	David∕M. Jacobson
Done at		• on	
	LOCATION	DATE	Kangho Lee
Done at			Seung H. Kang
	LOCATION	DATE	Seung H. Kang
Done at		, on	Matthew Michael Nowak
	LOCATION	DATE	Matthew Michael Nowak

AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	San Diggo, c	n // 6/2014 DATE	Zhaseka Un Xiaochun Zhu
	LOCATION , C		Steven M. Millendorf
Done at	LOCATION , c	on	Xu Guo
Done at	LOCATION	on DATE	David M. Jacobson
Done at	San Viego, c	on <u>//7/20/4</u> DATE	Kangho Lee
Done at	San Diego	on 117 (2014 DATE	Seung H. Kang
Done at	Sen Dega, o	on 773, 2014 DATE	Matthew Michael Nowak

PATENT REEL: 032619 FRAME: 0353

**RECORDED: 04/07/2014**