# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3391562

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
SEONG-OOK JUNG	05/06/2015
TAEHUI NA	05/06/2015
JISU KIM	05/06/2015
JUNG PILL KIM	06/05/2015
SEUNG HYUK KANG	06/05/2015

### **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:	14693755

## **CORRESPONDENCE DATA**

**Fax Number:** (703)621-7155

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:** 7036217140

**Email:** meo.docket@mg-ip.com

Correspondent Name: MUNCY, GEISSLER, OLDS & LOWE, P.C. \_QUAL

**Address Line 1:** 4000 LEGATO ROAD, SUITE 310

Address Line 4: FAIRFAX, VIRGINIA 22033

ATTORNEY DOCKET NUMBER:	QC150406
NAME OF SUBMITTER:	MARK E. OLDS
SIGNATURE:	/Mark E. Olds/
DATE SIGNED:	06/10/2015

**Total Attachments: 6** 

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PATENT REEL: 035881 FRAME: 0331

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#### ASSIGNMENT

### WHEREAS, WE,

- Seong-Ook JUNG, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea and a resident of Seoul, Korea.
- 2. Tachui NA, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea and a resident of Seoul, Korea,
- Jisu KIM, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea and a resident of Seoul, Korea,
- 4. Jung Pill KIM, 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. Seung Hynk KANG, a citizen of 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 SYSTEM, APPARATUS, AND METHOD FOR A SENSE CIRCUIT (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and Industry-Academic Cooperation Foundation, Yonsei University, 134 Sinchon-dong, Seodaemun-gu, Seoul 120-749, Korea (hereinafter "ASSIGNEES"), 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 ASSIGNEES, 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(s), 14/693,755 filed April 22, 2015, Qualcomm Reference No. 150406, and all provisional applications relating thereto, (and do hereby authorize ASSIGNEES and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), 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 ASSIGNEES, 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 ASSIGNEES, 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 ASSIGNEES, 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 ASSIGNEES, 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 all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

## PATENT QUALCOMM Ref. No. 150406 Page 3 of 3

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

Done at	EDWE SULLA KATES	on May/ob/295	- Jun Leoy Ol
	LOCATION	DATE	Scong-Ook JUNG
Done at	Searl, Seath Keron, c	on Hay/16/2015	
·	LOCATION	DATE	Tachui NA
Done at	Soul Sour Your	on May 106/0015 DATE	
,	LOCATION	DATE	Jisu KIM
Done at	, c	on	
	LOCATION	DATE	Jung Pill KIM
Done at	> <	on	
	LOCATION	DATE	Seung Hyuk KANG

### ASSIGNMENT

## WHEREAS, WE,

- Seong-Ook JUNG, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea and a resident of Seoul, Korea,
- 2. Taehui NA, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea and a resident of Seoul, Korea,
- Jisu KIM, a citizen of Korea, having a mailing address located at Engineering Bldg-2 725, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749. Korea and a resident of Seoul, Korea,
- 4. Jung Pill KIM, 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. Seung Hyuk KANG, a citizen of 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 SYSTEM, APPARATUS, AND METHOD FOR A SENSE CIRCUIT (collectively the "INVENTIONS") for which WE have executed and/or may execute one or more patent applications therefor; and

WHEREAS, QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and Industry-Academic Cooperation Foundation, Yonsei University, 134 Sinchon-dong, Seodaemun-gu, Seoul 120-749, Korea (hereinafter "ASSIGNEES"), 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 ASSIGNEES, 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(s). 14/693,755 filed April 22, 2015, Qualcomm Reference No. 150406, and all provisional applications relating thereto, (and do hereby authorize ASSIGNEES and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), 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 ASSIGNEES, 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 ASSIGNEES, 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 ASSIGNEES, 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 ASSIGNEES, 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 all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

PATENT QUALCOMM Bef. No. 150406 Page 3 of 3

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	Seong-Ook JUNG
Done at	, on		
	LOCATION	DATE	Tachui NA
Done at	.on		
	LOCATION	DATE	Jisu KIM
Done at	Sau Digg , on	0 6/037/3°	The State of the S
en en en en e	LOCATION	DATÉ	Jung Pili KIM
Done at	SNA DEEN E. on LOCATION	00 05 2015	LM ASA_
	LOCATION	DATE	Seung Hyuk KANG

PATENT REEL: 035881 FRAME: 0338

**RECORDED: 06/10/2015**