PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PRINCE GUPTA	04/12/2013
DANIEL WAGNER	04/15/2013
GERHARD REITMAYR	04/15/2013
ALESSANDRO MULLONI	04/15/2013

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	15182750		

CORRESPONDENCE DATA

Fax Number: (978)969-3180

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.

using a lax number, it provided, it that is unsuccessful, it will be sent vide

Phone: 617-830-5440

Email: HCDocketing@hunter-clark.com

Correspondent Name: HUNTER CLARK PLLC
Address Line 1: 900 CUMMINGS CENTER

Address Line 2: SUITE 213-T

Address Line 4: BEVERLY, MASSACHUSETTS 01915

ATTORNEY DOCKET NUMBER:	130047D1 / 10034-809D01US	
NAME OF SUBMITTER:	DARYL ACHILLES	
SIGNATURE: /Daryl Achilles/		
DATE SIGNED:	06/15/2016	

Total Attachments: 6

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PATENT 503871931 REEL: 038916 FRAME: 0487

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ASSIGNMENT

WHEREAS, WE,

- 1. **Prince GUPTA**, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 and a resident of San Diego California,
- 2. **Daniel WAGNER,** a citizen of Austria, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Vienna, Austria,
- 3. **Gerhard REITMAYR**, a citizen of Austria, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Graz, Austria,
- 4. **Alessandro MULLONI,** a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Wien, Austria,

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 **REFERENCE COORDINATE SYSTEM DETERMINATION** (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(s). 13/787,525 filed March 6, 2013, Qualcomm Reference No. 130047, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/722,023, filed November 2, 2012, Qualcomm Reference No. 130047P1, (and do hereby authorize ASSIGNEE 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 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 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;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, on 4/12/13

LOCATION DATE

Prince G

PATENT QUALCOMM Ref. No. 130047 Page 3 of 3

Done at		, on		
-	LOCATION		DATE	Daniel WAGNER
Done at _	LOCATION	, on	DATE	Gerhard REITMAYR
Done at _	LOCATION	_, on	DATE	Alessandro MULLONI

ASSIGNMENT

WHEREAS, WE,

- 1. **Prince GUPTA,** a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121 and a resident of San Diego California,
- 2. Daniel WAGNER, a citizen of Austria, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Vienna, Austria,
- 3. Gerhard REITMAYR, a citizen of Austria, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Graz, Austria,
- 4. Alessandro MULLONI, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Wien, Austria,

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 **REFERENCE COORDINATE SYSTEM DETERMINATION** (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(s). 13/787,525 filed March 6, 2013, Qualcomm Reference No. 130047, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/722,023, filed November 2, 2012, Qualcomm Reference No. 130047P1, (and do hereby authorize ASSIGNEE 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;

QUALCOMM Ref. No. 130047

Page 2 of 3

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 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;

AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on	
	LOCATION	DATE	Prince GUPTA

PATENT

QUALCOMM Ref. No. 130047 Page 3 of 3

Done at Viences, on 70 ?3 - 04 - 15 Queen 2 Daniel WAGNER

Done at Vienny, on 2013-04-15 Inle

Gerhard REITMAYR

Done at VIENNA, on 15/04/2013 Alessandro MULLONI

PATENT REEL: 038916 FRAME: 0494

RECORDED: 06/15/2016