# 505952766 03/05/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5999471

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT	
NATURE OF CONVEYANCE:	Corrective Assignment to correct the DATE THAT INVENTOR GOHARI EXECUTED THE ASSIGNMENT previously recorded on Reel 051408 Frame 0884. Assignor(s) hereby confirms the ASSIGNMENT.	
RESUBMIT DOCUMENT ID:	505895906	
	·	

### **CONVEYING PARTY DATA**

Execution Date
12/01/2019
12/10/2019
12/09/2019
12/12/2019
12/16/2019
12/17/2019
12/17/2019

### **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:	16576535		

### **CORRESPONDENCE DATA**

(303)473-2720 Fax Number: 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: 3034732700 skfredrickson@hollandhart.com Email: MICHAEL DRAPKIN Correspondent Name: Address Line 1: P.O. BOX 11583 Address Line 4: SALT LAKE CITY, UTAH 84147 **ATTORNEY DOCKET NUMBER:** PR131GR.US CORRECTED ASSI NAME OF SUBMITTER: MICHAEL L. DRAPKIN

> PATENT REEL: 052040 FRAME: 0030

SIGNATURE:	/Michael L. Drapkin/	
DATE SIGNED:	03/05/2020	
Total Attachments: 5		
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source=185321 Corrected Coversheet & Assignment#page4.tif		
source=185321 Corrected Coversheet & Assignment#page5.tif		

## 505845794 01/03/2020

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5892730

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEY	ANCE:	ASSIGNMENT	
CONVEYING PARTY	' DATA		
Name			Execution Date
ALEXANDROS MAN	OLAKOS		12/01/2019
SONY AKKARAKAR	AN		12/10/2019
AMIR AMINZADEH GOHARI			09/12/2019 12/09/201
JUNE NAMGOONG			12/12/2019
JOSEPH BINAMIRA SORIAGA			12/16/2019
PETER GAAL			12/17/2019
TINGFANG JI			12/17/2019
RECEIVING PARTY	DATA		
Name:	QUALCOMM INCORPORATED		
Street Address:	5775 MOREHOUSE DRIVE		
City:	SAN DIEGO		

### CORRESPONDENCE DATA

**Application Number:** 

PROPERTY NUMBERS Total: 1
Property Type

CALIFORNIA

16576535

92121-1714

State/Country:

**Postal Code:** 

Fax Number:(303)473-2720Correspondence 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:	303-473-2700		
Email:	skfredrickson@hollandhart.com		
Correspondent Name:	HOLLAND & HART LLP/QUALCOMM		
Address Line 1:	P.O. BOX 11583		
Address Line 4:	SALT LAKE CITY, UTAH 84147		
ATTORNEY DOCKET NUMBER		PR131GR.US (103038.0928)	
NAME OF SUBMITTER:		MICHAEL L. DRAPKIN	
SIGNATURE:		/Michael L. Drapkin/	
DATE SIGNED:		01/03/2020	

Number

### ASSIGNMENT

#### WHEREAS, WE,

- 1. Alexandros MANOLAKOS, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 2. Sony AKKARAKARAN, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 3. Amir AMINZADEH GOHARI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 4. June NAMGOONG, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 5. Joseph Binamira SORIAGA, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- Peter GAAL, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,
- 7. Tingfang JI, having a mailing address located at 5775 Morehouse Drive, San Diego, CA, 92121-1714,

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 **SOUNDING REFERENCE SIGNAL PARAMETER DETERMINATION TECHNIQUES** (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. **16/576,535** filed **September 19, 2019**, Qualcomm Reference No.

PATENT REEL: 052040 FRAME: 0033 **185321**, and all provisional applications relating thereto, together with Greece Provisional Application No. **20180100459** filed **October 5, 2018**, Qualcomm Reference No. **185321GR1**, (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, 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;

PATENT QUALCOMM Ref. No. 185321 Page 3 of 3

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

			$\mathcal{A}$
Done at	San Mildy, CA, on	12/11/2019	<u>Alexander</u>
	LOCATION	DATE	* Alexandros MANOLAKOS
Done at	she grees, cA, on_	12/10/7019	smy/لد. Sony AKKARAKARAN
	LOCATION	DATE	Sony AKKARAKARAN
Done at	, on		
·	LOCATION	DATE	Amir AMINZADEH GOHARI
Done at	Saler (A, on LOCATION	12/(1/2019	
			www.u
Done at	<u>Son Dies, M</u> , on	12/16/2017	Joseph Binamira SORIAGA
ŝ	LOCATION	DATE	Joseph Bigamira SORIAGA
Done at ]	Son Dieg., on_	12/17/2019	Peter GAAL
	LOCATION	DATE	Peter GAAL
Done at 2	LOCATION	N/12019	
~	LOCATION	DATE	Tingfang JI

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	Alexandros MANOLAKOS
Done at _		_, on _	DATE	
	LOCATION		DATE	Sony AKKARAKARAN
Done at 🮿	<u>Sanfa clara</u> LOCATION	_, on _	<u>911272019</u> Date	Amir AMINZADEH GOHARI
Done at _	LOCATION	_, on _	DATE	June NAMGOONG
Done at _	LOCATION	_, on	DATE	Joseph Binamira SORIAGA
Done at _	LOCATION	_, on _	DATE	Peter GAAL
Done at		_, on _	DATE	Tingfang JI
	LUCATION		DATE	lingtang Ji

**RECORDED: 02/03/2020**