505372973 03/13/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

sion v1.1 EPAS ID: PAT5419765

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ABHISHEK PRAMOD PATIL	01/25/2019
JOUNI KALEVI MALINEN	01/27/2019
RAVI GIDVANI	02/08/2019
ALFRED ASTERJADHI	01/28/2019
GEORGE CHERIAN	03/05/2019

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:	16182345

CORRESPONDENCE DATA

Fax Number: (281)754-4914

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.

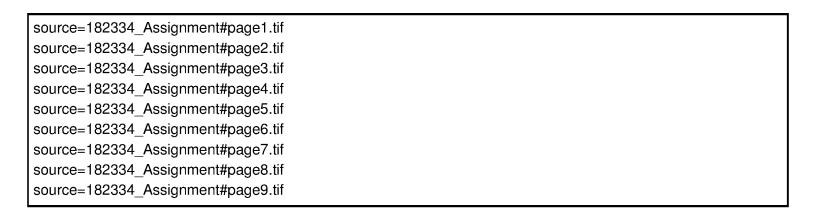
Phone: 2817580025

Email: Imcmillan@deliziolaw.com
Correspondent Name: DELIZIO LAW, PLLC
Address Line 1: 15201 MASON RD.
Address Line 2: SUITE 1000-312

Address Line 4: CYPRESS, TEXAS 77433

ATTORNEY DOCKET NUMBER:	182334
NAME OF SUBMITTER:	LINDSAY MCMILLAN
SIGNATURE:	/Lindsay K. McMillan/
DATE SIGNED:	03/13/2019

Total Attachments: 9



ASSIGNMENT

WHEREAS, WE,

- 1. Abhishek Pramod PATIL, 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, CA
- 2. **Jouni Kalevi MALINEN**, a citizen of **Finland**, having a mailing address located at **5775 Morehouse Drive**, **San Diego**, **CA 92121-1714** and a resident of **Tuusula**, **Finland**
- 3. Ravi GIDVANI, a citizen of the United States of America, having a mailing address located at 630 Cochise Court, Fremont, CA 94539 and a resident of Fremont, CA
- 4. Alfred ASTERJADHI, 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, CA
- 5. **George CHERIAN**, 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**, **CA**

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 **SIGNALING IDENTIFIERS FOR MULTIPLE BASIC SERVICES SETS (BSS)** (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). 16/182,345 filed November 6, 2018, Qualcomm Reference No. 182334 and all provisional applications relating thereto, together with, U.S. Provisional Application No(s). 62/636,131 filed February 27, 2018, Qualcomm Reference No. 182334P1 and

with U.S. Provisional Application No. 62/643,642 filed March 15, 2018, Qualcomm Reference No. 182334P2 (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 covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	Son Diago LOCATION	, on	Abhishek Pramod PATIL
Done at	LOCATION	, on DATE	Jouni Kalevi MALINEN
Done at	LOCATION	, on DATE	Ravi GIDVANI
Done at .	SAN DIEGO LOCATION	, on <u>01/28/2019</u> DATE	Alfred ASTERJADHI
Done at	Son O'Y LOCATION	on $\frac{3/5/19'}{\text{DATE}}$	George CHERIAN

ASSIGNMENT

WHEREAS, WE,

- 1. Abhishek Pramod PATIL, 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, CA
- 2. **Jouni Kalevi MALINEN**, a citizen of **Finland**, having a mailing address located at **5775 Morehouse Drive**, **San Diego**, **CA 92121-1714** and a resident of **Tuusula**, **Finland**
- 3. Ravi GIDVANI, a citizen of the United States of America, having a mailing address located at 630 Cochise Court, Fremont, CA 94539 and a resident of Fremont, CA
- 4. Alfred ASTERJADHI, 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, CA
- 5. **George CHERIAN**, 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**, **CA**

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 **SIGNALING IDENTIFIERS FOR MULTIPLE BASIC SERVICES SETS (BSS)** (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). 16/182,345 filed November 6, 2018, Qualcomm Reference No. 182334 and all provisional applications relating thereto, together with, U.S. Provisional Application No(s). 62/636,131 filed February 27, 2018, Qualcomm Reference No. 182334P1 and

with U.S. Provisional Application No. 62/643,642 filed March 15, 2018, Qualcomm Reference No. 182334P2 (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 covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		, on	
	LOCATION	DATE	Abhishek Pramod PATIL
Done at	TUKSULA ; FINLAND LOCATION	, on <u>i IA 2013</u> DATE	Jouni Kalevi MALINEN
Done at	LOCATION	, on	Ravi GIDVANI
Done at	LOCATION	on	Alfred ASTERJADHI
Done at	LOCATION	on	George CHERIAN

ASSIGNMENT

WHEREAS, WE,

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- 5. **George CHERIAN**, 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**, **CA**

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with U.S. Provisional Application No. 62/643,642 filed March 15, 2018, Qualcomm Reference No. 182334P2 (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;

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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	Abhishek Pramod PATIL
Done at	LOCATION	, on	DATE	Jouni Kalevi MALINEN
Done at	Sea Jose LOCATION	, on	2/8/2019 DATE	Ravi GIDVANI
Done at	LOCATION	, on _	DATE	Alfred ASTERJADHI
Done at	LOCATION	, on _	DATE	George CHERIAN

PATENT REEL: 048587 FRAME: 0161

RECORDED: 03/13/2019