PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4383366

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHANG-YU HUANG	04/20/2017
MICHAEL NEATH	04/20/2017
MICHAEL LE GALLAIS KISSIN	04/20/2017

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:	15491016				

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.

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

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ATTORNEY DOCKET NUMBER:	160611 / 10034-1017001US			
NAME OF SUBMITTER:	T.J. CLARK			
SIGNATURE:	/T.J. Clark/			
DATE SIGNED:	04/25/2017			

Total Attachments: 3

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PATENT REEL: 042136 FRAME: 0964 504336678

ASSIGNMENT

WHEREAS, WE,

- Chang-Yu Huang, a citizen of New Zealand, having a mailing address located at 5775
 Morehouse Drive, San Diego, California 92121-1714 and a resident of Auckland, New
 Zealand,
- Michael Neath, a citizen of New Zealand, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714 and a resident of Auckland, New Zealand,
- Michael Le Gallais Kissin, a citizen of New Zealand, having a mailing address located at 5775
 Morehouse Drive, San Diego, California 92121-1714 and a resident of Auckland, New
 Zealand.

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 BASE SIDE VEHICLE IDENTIFICATION USING VEHICLE CONTROLLER SWITCHING FREQUENCY (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). 15/491,016 filed April 19, 2017, Qualcomm Reference No. 160661 and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/354,344 filed June 24, 2016, Qualcomm Reference No. 160661P1, (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;

PATENT REEL: 042136 FRAME: 0965 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 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;

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AND WE HEREBY covenant t	hat W	: will	not	execute	any	writing	or	do	any	act
whatsoever conflicting with these present										
						ريسيدر		with the		

Done at Auckland, on DATE Chang-Yu HUANG

Done at Audional , on 10 April 2017

LOCATION DATE Michael Le Gallais KISSIN

PATENT REEL: 042136 FRAME: 0967

RECORDED: 04/25/2017