502617442 12/31/2013

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2664050

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YU HUANG	12/05/2013
THOMAS CLARK BRYAN	10/10/2013
MARK WAYLAND	10/10/2013

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:	13918771

CORRESPONDENCE DATA

 Fax Number:
 (202)857-6395

 Phone:
 213-629-7400

Email: dcipdocket@arentfox.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: ARENT FOX, LLP
Address Line 1: 1717 K STREET, NW

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20036-5342

ATTORNEY DOCKET NUMBER:	030284.04161/130638
NAME OF SUBMITTER:	RACHELE WITTWER
Signature:	/Rachele Wittwer/
Date:	12/31/2013

Total Attachments: 3

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ASSIGNMENT

WHEREAS, WE,

- 1. Yu HUANG, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, and a resident of San Diego, CA,
- 2. Thomas Clark BRYAN, a citizen of The United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121, and a resident of San Diego, CA, and
- 3. Mark WAYLAND, a citizen of The United States of America, having a mailing address located at at 5775 Morehouse Drive, San Diego, CA 92121, 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 **SELF-BIASED RECEIVER** (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 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. 13/918,771 filed June 14, 2013, Qualcomm Reference No. 130638, and all provisional applications relating thereto, (and do hereby authorize ASSIGNEE and its representatives 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 Unites 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

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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 application, 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	San Diego LOCATION	, on{2\0\\$\/2\0\}_ DATE	Yu HUANG
Done at_	LOCATION	, on DATE	Thomas Clark BRYAN
Done at_	LOCATION	, on DATE	Mark WAYLAND

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 application, 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 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:

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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	Yu HUANG
Done at Oscilon LOCATION	$\frac{\sqrt{0-(\delta^{2})}}{\text{DATE}}$	Thomas Clark BRYAN
Done at Constant LOCATION	on <u>(010-13</u> DATE	Mark WAYLAND

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