PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2854166

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VALERIYA PERELMAN	01/15/2014
VENKATA RAMANAN VENKATACHALAM JAYARAMAN	01/22/2014
ROHIT KAPOOR	01/14/2014
RASHID AHMED AKBAR ATTAR	05/12/2014
NELA GUREVICH	01/16/2014
DEBESH KUMAR SAHU	03/14/2014

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:	14152290	

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone:

Email: patents@wt-ip.com

Correspondent Name: WITHROW & TERRANOVA, PLLC **Address Line 1:** 100 REGENCY FOREST DRIVE

Address Line 2: SUITE 160

Address Line 4: CARY, NORTH CAROLINA 27518

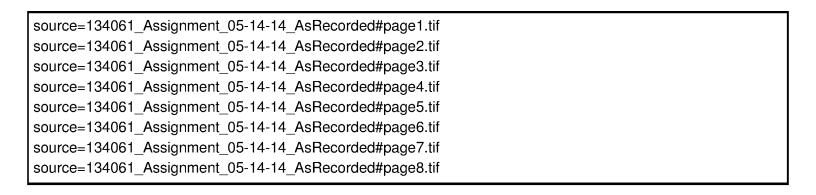
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Total Attachments: 8

REEL: 032883 FRAME: 0812

PATENT

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ASSIGNMENT

WHEREAS, WE,

- 1. Valeriya Perelman, a citizen of Israel, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Nesher, Israel,
- 2. Venkata Ramanan Venkatachalam Jayaraman, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of San Diego, California,
- 3. Rohit Kapoor, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of San Diego, California,
- 4. Rashid Ahmed Akbar Attar, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of San Diego, California,
- 5. Nela Gurevich, a citizen of Israel, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Yoqueam, Israel,
- 6. **Debesh Kumar Sahu**, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121 and a resident of Hyderabad, India,

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 SYSTEMS AND METHODS FOR MODEM CONTROL BASED ON FEEDBACK (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). 14/152,290 filed January 10, 2014,

Qualcomm Reference No. 134061, and all provisional applications relating thereto, (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;

Done at	Heifa, Israel	on ·	15, Jan , 20	014
			DATE	Valeriya Perelman
Done at		, on	·····	Venkata Ramanan Venkatachalam Jayaraman
	LOCATION		DATE	Venkata Ramanan Venkatachalam Jayaraman
Done at	LOCATION	, on		
	LOCATION		DATE	Rohit Kapoor
Done at	* ***	on.		
	LOCATION		DATE	Rashid Ahmed Akbar Attar
Done at		, on		
. •	LOCATION		DATE	Nela Gurevich
Done at		, on	•••••	
	LOCATION		DATE	Debesh Kumar Sahu

Done at .		. on	
	LOCATION	DATE	Valeriya Perelman
Done at	5775 Marcheuse b San Diego, ca	k. on <u>01/22/2014</u>	Venkata Ramanan Venkatachalam Jayaraman
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Done at		On	
	LOCATION	on	Rohit Kapoor
Done at		. on	
•	LOCATION	on	Rashid Ahmed Akbar Attar
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	LOCATION	DATE	Nela Gurevich
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	LOCATION	DATE	Debesh Kumar Sahu

Done at		on		
	LOCATION		DATE	Valeriya Perelman
Done at		on		
	LOCATION		DATE	Venkata Ramanan Venkatachalam Jayaraman
Done at S	AN DIEGO	on (1/14/2014	Robit Roker
	LOCATION	,	DATE	Robit Kapoor
Done at		, on		
	LOCATION		DATE	Rashid Ahmed Akhar Attar
Done at	* ^\^? & M**-0**	, on		
	LOCATION		DATE	Nela Gurevich
Done at		, on		
	LOCATION		DATE	Debesh Kumar Sahu

Done at		on _		
	LOCATION		DATE	Valeriya Perelman
Done at		on_		
	LOCATION		DATE	Venkata Ramanan Venkatachalam Jayaramar
Done at		, on		
•	LOCATION		DATE	Rohit Kapoer
Done at	SAM Diego	, on	5/12/14	LASME -
	LOCATION		DATE	Rashid Ahmed Akbar Attar
Done at		_, on		
	LOCATION		DATE	Nela Gurevich
Done at		on_		
•	LOCATION		DATE	Debesh Kumar Sahu

Done at _		, on		
	LOCATION		DATE	Valeriya Perelman
Done at _		, on		
	LOCATION		DATE	Venkata Ramanan Venkatachalam Jayaraman
Done at_		, on		
	LOCATION	·	DATE	Rohit Kapoor
Done at _		., on		Rashid Ahmed Akbar Attar
	LOCATION		DATE	Rashid Ahmed Akbar Attar
Done at _	Haifa, Israe LOCATION	, on	16 - Jan - 201	4 4
	LOCATION		DATE	Nela Gurevich
Done at_		, on		Debesh Kumar Sahu
	LOCATION		DATE	Debesh Kumar Sahu

PATENT QUALCOMM Ret, No. 134061 Page 3 of 3

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

Done at _		, 08	
	LOCATION	DATE	Valeriya Perelman
Done at_		s On	V. C. Ya.
	LOCATION	DATE	Venkata Remanan Venkatachalam Jayaraman
Done at _		, on	
	LOCATION	DATE	Robit Kapoor
Done at			
	LOCATION	DATE	Rashid Ahmed Akhar Attar
Done at	·····	8.08	
	LOCATION	DAŢE	Nela Gurevich
Done at 1	aciul CYE	., on <u>14-MA</u> Q	_14 <u>&S.S. V. S.L.</u> Debesh Kumar Sahu
	LOCATION	DATE	Debesh Kumar Sahu

PATENT REEL: 032883 FRAME: 0821

RECORDED: 05/14/2014