502523284 10/07/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2568471

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MAHESH RAMACHANDRAN	03/22/2013
ABHISHEK TYAGI	03/28/2013
SERAFIN DIAZ SPINDOLA	09/24/2013

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:	13830664	

CORRESPONDENCE DATA

Fax Number: (408)378-7770 Phone: 4083787777

Email: dchan@svpatentgroup.com

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

Correspondent Name: SILICON VALLEY PATENT GROUP LLP

Address Line 1: 4010 MOORPARK AVENUE

Address Line 2: SUITE 210

Address Line 4: SAN JOSE, CALIFORNIA 95117

ATTORNEY DOCKET NUMBER: 124643 NAME OF SUBMITTER: THOMAS C. CHAN Signature: /Thomas C. Chan/		
	Signature:	/Thomas C. Chan/
ATTORNEY DOCKET NUMBER: 124643	NAME OF SUBMITTER:	THOMAS C. CHAN
	ATTORNEY DOCKET NUMBER:	124643

PATENT 502523284 REEL: 031357 FRAME: 0645

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Date:	10/07/2013
Total Attachments: 6 source=124643_AssignmentAsFiled_Oct-7- source=124643_AssignmentAsFiled_Oct-7- source=124643_AssignmentAsFiled_Oct-7- source=124643_AssignmentAsFiled_Oct-7- source=124643_AssignmentAsFiled_Oct-7- source=124643_AssignmentAsFiled_Oct-7-	2013#page2.tif 2013#page3.tif 2013#page4.tif 2013#page5.tif

ASSIGNMENT

WHEREAS, WE.

- 1. Mahesh Ramachandran, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121, and a resident of San Diego, CA,
- 2. **Abhishek Tyagi,** a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121, U.S.A and a resident of San Diego, CA,
- 3. Serafin Diaz Spindola, a citizen of Mexico, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, U.S.A 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 SYSTEMS AND METHODS OF MERGING MULTIPLE MAPS FOR COMPUTER VISION BASED TRACKING (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). 13/830,664 filed March 14, 2013, Qualcomm Reference No. 124643, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/720,804, filed October 31, 2012, Qualcomm Reference No. 124643P1, (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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at §	an Dieza CA,	m 03/22/2613	Genaly.
	LOCATION	DATE	Mahesh Ramachandran
Done at	, 0	n	
	LOCATION	DATE	Abhishek Tyagi
Done at	, c	n	
	LOCATION	DATE	Serafin Diaz Spindola

ASSIGNMENT

WHEREAS, WE,

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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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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 represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at	, 0	n	
Done at	LOCATION Son Diego .0 LOCATION	DATE m <u>03/28/2013</u> DATE	Mahesh Ramachandran Abhishek Tyagi
Done at	, c	n	
`	LOCATION	DATE	Serafin Diaz Spindola

ASSIGNMENT

WHEREAS, WE,

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- 3. Serafin Diaz Spindola, a citizen of Mexico, having a mailing address located at 5775 Morehouse Drive, San Diego, California, 92121-1714, U.S.A and a resident of San Diego, CA,

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Done at	, on		
	LOCATION	DATE	Mahesh Ramachandran
Done at	, on		
	LOCATION	DATE	Abhishek Tyagi
Done at ≤	oca Oiego, on	Sex 24th 2013	
	LOCATION	DATE	Serafin Diaz Spindola

PATENT REEL: 031357 FRAME: 0652

RECORDED: 10/07/2013