PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Yuriy Reznik	09/23/2011
Onur C Hamsici	09/23/2011
Sundeep Vaddadi	09/27/2011
John H Hong	11/17/2011
Chong U Lee	11/17/2011

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:	13229654

CORRESPONDENCE DATA

Fax Number: (408)378-7770 Phone: 408-378-7777

Email: qualcomm_PAIR@svpatentgroup.com

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

via US Mail.

Correspondent Name: Silicon Valley Patent Group, Attn: QCM

Address Line 1: 4010 Moorpark Avenue

Address Line 2: Suite 210

Address Line 4: San Jose, CALIFORNIA 95117

ATTORNEY DOCKET NUMBER:	Q111926USTC	
NAME OF SUBMITTER:	Thomas Chan	PATENT

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ASSIGNMENT

WHEREAS, WE,

- 1. Yuriy REZNIK, a citizen of Ukraine, having a mailing address located at 8775 Costa Verde Blvd #319, San Diego, CA 92122, U.S.A., and a resident of San Diego, CA,
- 2. Onur C. HAMSICI, a citizen of Turkey, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and a resident of La Jolla, CA,
- 3. Sundeep VADDADI, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and a resident of San Diego, CA,
- 4. John H. HONG, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and a resident of San Clemente, CA,
- 5. Chong U. LEE, a citizen of the United States of America, 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 CODING OF FEATURE LOCATION INFORMATION (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). 13/229,654 filed September 9, 2011, Qualcomm Reference No. 111926, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/522,171, filed August 10, 2010, Qualcomm Reference No. 111926P1, (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.

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QUALCOMM Ref. No. 111926 Page 3 of 3

Done at	SAN DIELD, on	9/23/11	2222 222
	LOCATION	DATE	Yuriy REZNIK
Done at	SAN PIECE, on	9/23/11 DATE	Onur C. HAMSICI
Done at	LOCATION	DATE	Sundcep VADDADI
Done at	LOCATION , on	DATE	John H. HONG
Done at	, on	DATE	Chong II I.FE

ASSIGNMENT

WHEREAS, WE.

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- 3. Sundeep VADDADI, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and a resident of San Diego, CA,
- 4. **John H. HONG**, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A., and a resident of San Clemente, CA.
- 5. Chong U. LEE, a citizen of the United States of America, 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 **CODING OF FEATURE LOCATION INFORMATION** (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). 13/229,654 filed September 9, 2011, Qualcomm Reference No. 111926, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/522,171, filed August 10, 2010, Qualcomm Reference No. 111926P1, (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.

PATENT QUALCOMM Ref. No., 111926 Page 3 of 3

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	LOCATION	, on	Yuriy REZNICK
Done at _		, on DATE	
	LOCATION	DATE	Onur C. HAMSICI
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Done at 🧘	FNDIELD	, on 50/61-27-201	V.Swent. Sundeep VADDADI
	LOCATION	DATE	Sundeep VADDADI
Done at		, on	John H. HONG
	LOCATION	DATE	John H. HONG
Done at		, on	Chang II. LFE
	LOCATION	DATE	Chang U. LEE

ASSIGNMENT

WHEREAS, WE,

- 1. Yuriy REZNICK, a citizen of Ukraine, having a mailing address located at 8775 Costa Verde Blvd #319, San Diego, CA 92122, U.S.A., and a resident of San Diego, CA,
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- 3. Sundeep VADDADI, a citizen of India, 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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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). 13/229,654 filed September 9, 2011, Qualcomm Reference No. 111926, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/522,171, filed August 10, 2010, Qualcomm Reference No. 111926P1, (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 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 _		_, on	<u> </u>
	LOCATION	DATE	Yuriy REZNICK
Done at _	LOCATION	_, on	Onur C. HAMSICI
	*** *********	T 0 4 4 T.	
Done at_	LOCATION	_, on	Sundeep VADDADI
Done at	Sandiezo, ch LOCATION	on 11/17/11 DATE	John H. HONG
Done at _	LOCATION	, on <u>1/13/24//</u> DATE	Chong U. LEE

PATENT REEL: 027276 FRAME: 0059

RECORDED: 11/23/2011