PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2788610

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SANTOSH PAUL ABRAHAM	03/17/2014
GEORGE CHERIAN	03/12/2014
ALIREZA RAISSINIA	03/12/2014
GUIDO ROBERT FREDERIKS	03/12/2014

RECEIVING PARTY DATA

Name:	QUALCOMM INCORPORATED	
Street Address: 5775 MOREHOUSE DRIVE		
City:	SAN DIEGO	
State/Country:	CALIFORNIA	
Postal Code:	92121	

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	14197018
Application Number:	61775298

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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

US Mail.

Phone: 949-760-0404

Email: efiling@knobbe.com

Correspondent Name: KNOBBE MARTENS OLSEN & BEAR

Address Line 1: 2040 MAIN STREET

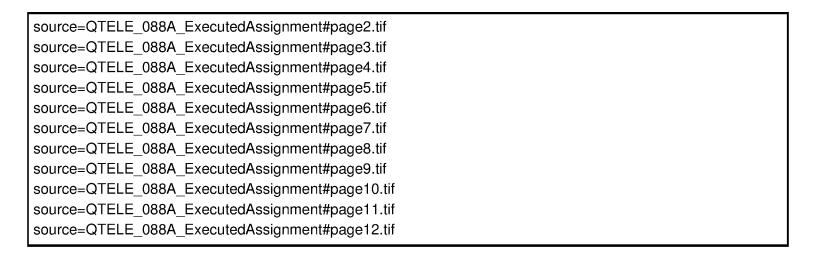
Address Line 2: 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	QTELE.088A/131960
NAME OF SUBMITTER:	ERIC M. NELSON
SIGNATURE:	/Eric Nelson/
DATE SIGNED:	03/27/2014

Total Attachments: 12

source=QTELE_088A_ExecutedAssignment#page1.tif



WHEREAS, WE,

- 1. Santosh Paul Abraham, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California.
- George Cherian, a citizen of the United States, having a mailing address located at 5775
 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego,
 California.
- 3. Alireza Raissinia, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Monte Sereno, California.
- 4. Guido Robert Frederiks, a citizen of the Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Aptos, California.

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 SYNCHRONIZATION WITHIN A NEIGHBOR AWARE NETWORK (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). 14/197,018 filed March 4, 2014, Qualcomm Reference No. 131960, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/775,298, filed March 8, 2013, Qualcomm Reference No. 131960P1, (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 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;

PATENT QUALCOMM Rof. No. 131960/QTELE.088A 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	Spul Differ	2 on <u>3191201</u> 9	1-1-1-
	LOCATION	DATE	Santosh Paul Ahrsham
Done at	LOCATION	DATE	George Cherian
Done at		, on	
	LOCATION	DAIE	Alireza Raissinia
Done at		, on	
	LOCATION	DATE	Guido Robert Frederiks
1743631	?		

031014

WHEREAS, WE.

- 1. Santosh Paul Abraham, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California.
- 2. George Cherian, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California.
- 3. Alireza Raissinia, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Monte Sereno, California.
- 4. Guido Robert Frederiks, a citizen of the Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Aptos, California.

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 SYNCHRONIZATION WITHIN A NEIGHBOR AWARE NETWORK (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). 14/197,018 filed March 4, 2014, Qualcomm Reference No. 131960, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/775,298, filed March 8, 2013, Qualcomm Reference No. 131960P1, (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 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 covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at		on -	
	LOCATION	DATE	Santosh Paul Abraham
Done at	Sen Digg.	on 3/12/14	Confige Cherian
Done at	LOCATION	onDATE	Alireza Raissinia
Done at	LOCATION ,	On	Guido Robert Frederiks
1743631 031014	7		

WHEREAS, WE,

- 1. Santosh Paul Abraham, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California.
- 2. George Cherian, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California,
- 3. Alireza Raissinia, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Monte Sereno. California.
- 4. Guido Robert Frederiks, a citizen of the Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Aptos, California.

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 SYNCHRONIZATION WITHIN A NEIGHBOR AWARE NETWORK (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). 14/197,018 filed March 4, 2014, Qualcomm Reference No. 131960, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/775,298, filed March 8, 2013, Qualcomm Reference No. 131960P1, (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 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;

PATENT
QUALCOMM Ref. No. 131960/QTELE.088A
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		on		
	LOCATION	DATE	Santosh Paul Abraham	
Done at		, on		
	LOCATION	DATE	George Cherian	•
Done at	SACATION	_, on Neph 12/2014_	Matireza Rajesinia	
Done at		, on		غ غ
	LOCATION	DATE	Guido Robert Frederiks	

17436317 031014

WHEREAS, WE,

- 1. Santosh Paul Abraham, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California,
- 2. George Cherian, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of San Diego, California,
- 3. Alireza Raissinia, a citizen of the United States, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Monte Sereno, California,
- 4. Guido Robert Frederiks, a citizen of the Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714, U.S.A. and a resident of Aptos, California.

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 SYNCHRONIZATION WITHIN A NEIGHBOR AWARE NETWORK (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). 14/197,018 filed March 4, 2014, Qualcomm Reference No. 131960, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/775,298, filed March 8, 2013, Qualcomm Reference No. 131960P1, (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 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;

PATENT QUALCOMM Ref. No. 131960/QTELE.088A 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	,0	n	
	LOCATION	DATE	Santosh Paul Abraham
Done at	, 6	913	
***************************************	LOCATION	DATE	George Cherian
Done at	LOCATION C	DATE	Alireza Raissinia
Done at	SonJose CA.	m 03/12/14	Guido Robert Frederiks
1743631 031014	7		puttilities in the second seco

PATENT REEL: 032542 FRAME: 0658

RECORDED: 03/27/2014