

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4247736

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ABHISHEK PRAMOD PATIL	12/07/2015
SANTOSH PAUL ABRAHAM	02/23/2016
GEORGE CHERIAN	12/07/2015
ALIREZA RAISSINIA	02/26/2016
JAMES CHO	01/27/2016
GUIDO FREDERIKS	01/28/2016
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:	15417077
CORRESPONDENCE DATA	
Fax Number:	(512)327-5575
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	512-327-5515
Email:	jsmith@tlgiplaw.com
Correspondent Name:	TOLER LAW GROUP
Address Line 1:	8500 BLUFFSTONE COVE
Address Line 2:	SUITE A201
Address Line 4:	AUSTIN, TEXAS 78759
ATTORNEY DOCKET NUMBER:	147235U1D1
NAME OF SUBMITTER:	JASON D. SMITH
SIGNATURE:	/Jason D. Smith/
DATE SIGNED:	01/27/2017

Total Attachments: 18

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ASSIGNMENT

WHEREAS, WE,

1. **Abhishek Pramod PATIL**, a citizen of the **Republic of India**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
2. **Santosh Paul ABRAHAM**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
3. **George CHERIAN**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
4. **Alireza RAISSINIA**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Monte Sereno, CA**,
5. **James CHO**, a citizen of the **United States of America**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Mountain View, CA**,
6. **Guido FREDERIKS**, a citizen of the **Netherlands**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Watsonville, 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 **COMMUNICATION BETWEEN DEVICES OF 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). **14/883,469** filed **October 14, 2015**, Qualcomm Reference No. **147235U1**, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). **62/064,904**, filed **October 16, 2014**, Qualcomm Reference No. **147235P1**; **62/109,530**, filed **January 29, 2015**, Qualcomm Reference No. **147235P2**; and **62/205,472**, filed **August 14, 2015**, Qualcomm Reference No. **147235P3**, (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 covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at San Diego, on 12/7/15
LOCATION DATE

Abhishek Pramod PATIL
Abhishek Pramod PATIL

Done at _____, on _____
LOCATION DATE

Santosh Paul ABRAHAM
Santosh Paul ABRAHAM

Done at _____, on _____
LOCATION DATE

George CHERIAN
George CHERIAN

Done at _____, on _____
LOCATION DATE

Alireza RAISSINIA
Alireza RAISSINIA

Done at _____, on _____
LOCATION DATE

James CHO
James CHO

Done at _____, on _____
LOCATION DATE

Guido FREDERIKS
Guido FREDERIKS

ASSIGNMENT

WHEREAS, WE,

1. **Abhishek Pramod PATIL**, a citizen of the Republic of India, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
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5. **James CHO**, a citizen of the United States of America, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Mountain View, CA**,
6. **Guido FREDERIKS**, a citizen of the Netherlands, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Watsonville, 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 **COMMUNICATION BETWEEN DEVICES OF 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). 14/883,469 filed **October 14, 2015**, Qualcomm Reference No. 147235U1, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/064,904, filed **October 16, 2014**, Qualcomm Reference No. 147235P1; 62/109,530, filed **January 29, 2015**, Qualcomm Reference No. 147235P2; and 62/205,472, filed **August 14, 2015**, Qualcomm Reference No. 147235P3, (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

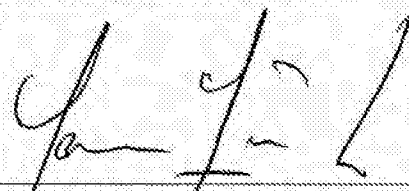
all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

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

Done at _____, on _____
LOCATION DATE

Abhishek Pramod PATIL

Done at SAN DIEGO, on 2/23/2016
LOCATION DATE


Santosh Paul ABRAHAM

Done at _____, on _____
LOCATION DATE

George CHERIAN

Done at _____, on _____
LOCATION DATE

Alireza RAISSINIA

Done at _____, on _____
LOCATION DATE

James CHO

Done at _____, on _____
LOCATION DATE

Guido FREDERIKS

ASSIGNMENT

WHEREAS, WE,

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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.

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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). 14/883,469 filed **October 14, 2015**, Qualcomm Reference No. 147235U1, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/064,904, filed **October 16, 2014**, Qualcomm Reference No. 147235P1; 62/109,530, filed **January 29, 2015**, Qualcomm Reference No. 147235P2; and 62/205,472, filed **August 14, 2015**, Qualcomm Reference No. 147235P3, (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;

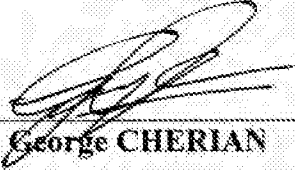
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all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

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
Abhishek Pramod PATIL

Done at _____, on _____
LOCATION DATE
Santosh Paul ABRAHAM

Done at San Diego, on 12/7/15
LOCATION DATE

George CHERIAN

Done at _____, on _____
LOCATION DATE
Alireza RAISSINIA

Done at _____, on _____
LOCATION DATE
James CHO

Done at _____, on _____
LOCATION DATE
Guido FREDERIKS

ASSIGNMENT

WHEREAS, WE,

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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 **COMMUNICATION BETWEEN DEVICES OF 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.

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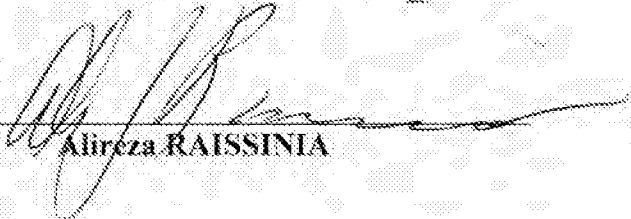
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Done at _____, on _____
LOCATION DATE
Abhishek Pramod PATIL

Done at _____, on _____
LOCATION DATE
Santosh Paul ABRAHAM

Done at _____, on _____
LOCATION DATE
George CHERIAN

Done at SJC, on 2/26/2016
LOCATION DATE

Alireza RAISSINIA

Done at _____, on _____
LOCATION DATE
James CHO

Done at _____, on _____
LOCATION DATE
Guido FREDERIKS

ASSIGNMENT

WHEREAS, WE,

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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 **COMMUNICATION BETWEEN DEVICES OF 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). 14/883,469 filed **October 14, 2015**, Qualcomm Reference No. 147235U1, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/064,904, filed **October 16, 2014**, Qualcomm Reference No. 147235P1; 62/109,530, filed **January 29, 2015**, Qualcomm Reference No. 147235P2; and 62/205,472, filed **August 14, 2015**, Qualcomm Reference No. 147235P3, (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;

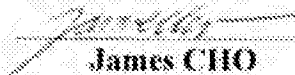
AND WE HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE
Abhishek Pramod PATIL

Done at _____, on _____
LOCATION DATE
Santosh Paul ABRAHAM

Done at _____, on _____
LOCATION DATE
George CHERIAN

Done at _____, on _____
LOCATION DATE
Alireza RAISSINIA

Done at San Jose, CA, on Jan 27, 2016
LOCATION DATE

James CHO

Done at _____, on _____
LOCATION DATE
Guido FREDERIKS

ASSIGNMENT

WHEREAS, WE,

1. **Abhishek Pramod PATIL**, a citizen of the Republic of India, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
2. **Santosh Paul ABRAHAM**, a citizen of the United States of America, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
3. **George CHERIAN**, a citizen of the United States of America, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
4. **Alireza RAISSINIA**, a citizen of the United States of America, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Monte Sereno, CA**,
5. **James CHO**, a citizen of the United States of America, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Mountain View, CA**,
6. **Guido FREDERIKS**, a citizen of the Netherlands, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Watsonville, 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 **COMMUNICATION BETWEEN DEVICES OF 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). 14/883,469 filed **October 14, 2015**, Qualcomm Reference No. 147235U1, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 62/064,904, filed **October 16, 2014**, Qualcomm Reference No. 147235P1; 62/109,530, filed **January 29, 2015**, Qualcomm Reference No. 147235P2; and 62/205,472, filed **August 14, 2015**, Qualcomm Reference No. 147235P3, (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;

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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.

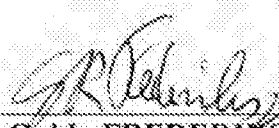
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Abhishek Pramod PATIL

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George CHERIAN

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LOCATION DATE
Alireza RAISSINIA

Done at _____, on _____
LOCATION DATE
James CHO

Done at San Jose CA, on 01/20/16
LOCATION DATE

Guido FREDERIKS