

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>SAMEER VERMANI</td> <td>09/25/2013</td> </tr> <tr> <td>DIDIER JOHANNES RICHARD VAN NEE</td> <td>12/03/2013</td> </tr> <tr> <td>SANAZ BARGHI</td> <td>09/20/2013</td> </tr> <tr> <td>HEMANTH SAMPATH</td> <td>10/10/2013</td> </tr> <tr> <td>VINCENT KNOWLES JONES IV</td> <td>09/20/2013</td> </tr> </tbody> </table>		Name	Execution Date	SAMEER VERMANI	09/25/2013	DIDIER JOHANNES RICHARD VAN NEE	12/03/2013	SANAZ BARGHI	09/20/2013	HEMANTH SAMPATH	10/10/2013	VINCENT KNOWLES JONES IV	09/20/2013
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VINCENT KNOWLES JONES IV	09/20/2013												
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													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14024520</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14024520								
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Application Number:	14024520												
CORRESPONDENCE DATA													
Fax Number:	(949)760-9502												
Phone:	949-760-0404												
Email:	efiling@knobbe.com												
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
Correspondent Name:	KNOBBE MARTENS OLSON & BEAR LLP												
Address Line 1:	2040 MAIN STREET												
Address Line 2:	14TH FLOOR												
Address Line 4:	IRVINE, CALIFORNIA 92614												
ATTORNEY DOCKET NUMBER:	QFDM.717A												
NAME OF SUBMITTER:	TRAVIS J. HILL												

OP \$40.00 14024520

Signature:	/Travis J. Hill Reg.# 70199/
Date:	12/10/2013
Total Attachments: 15 source=124376_ASST_2013_12_04_signed#page1.tif source=124376_ASST_2013_12_04_signed#page2.tif source=124376_ASST_2013_12_04_signed#page3.tif source=124376_ASST_2013_12_04_signed#page4.tif source=124376_ASST_2013_12_04_signed#page5.tif source=124376_ASST_2013_12_04_signed#page6.tif source=124376_ASST_2013_12_04_signed#page7.tif source=124376_ASST_2013_12_04_signed#page8.tif source=124376_ASST_2013_12_04_signed#page9.tif source=124376_ASST_2013_12_04_signed#page10.tif source=124376_ASST_2013_12_04_signed#page11.tif source=124376_ASST_2013_12_04_signed#page12.tif source=124376_ASST_2013_12_04_signed#page13.tif source=124376_ASST_2013_12_04_signed#page14.tif source=124376_ASST_2013_12_04_signed#page15.tif	

ASSIGNMENT

WHEREAS, WE,

1. Sameer VERMANI, a citizen of India, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
2. Didier Johannes Richard VAN NEE, a citizen of Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of Tull en 't Waal, Netherlands,
3. Sanaz BARGHI, a citizen of Iran, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
4. Hemanth SAMPATH, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
5. Vincent Knowles JONES, IV, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of Redwood City, 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 CONTROLLING ANTENNA RADIATION PATTERNS** (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). 14/024520 filed September 11, 2013, Qualcomm Reference No. 124376, and all provisional applications relating thereto, together with U.S. Provisional Application No. 61/702,129, filed September 17, 2012, Qualcomm Reference No. 124376P1, (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;

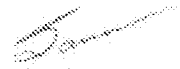
AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, 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 09/25/2013
LOCATION DATE



Sameer VERMANI

Done at _____, on _____
LOCATION DATE

Didier Johannes Richard VAN NEE

Done at _____, on _____
LOCATION DATE

Sanaz BARGHI

Done at _____, on _____
LOCATION DATE

Hemanth SAMPATH

Done at _____, on _____
LOCATION DATE

Vincent Knowles JONES, IV

16029993
081513

ASSIGNMENT

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4. Hemanth SAMPATH, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
5. Vincent Knowles JONES, IV, a citizen of United States, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of Redwood City, 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 CONTROLLING ANTENNA RADIATION PATTERNS** (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). 14/024520 filed September 11, 2013, Qualcomm Reference No. 124376, and all provisional applications relating thereto, together with U.S. Provisional Application No. 61/702,129, filed September 17, 2012, Qualcomm Reference No. 124376P1, (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

Sameer VERMANI

Done at Breukelen, on December 3, 2013
LOCATION DATE



Didier Johannes Richard VAN NEE

Done at _____, on _____
LOCATION DATE

Sanaz BARGHI

Done at _____, on _____
LOCATION DATE

Hemanth SAMPATH

Done at _____, on _____
LOCATION DATE

Vincent Knowles JONES, IV

16029993
081513

ASSIGNMENT

WHEREAS, WE,

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2. Didier Johannes Richard VAN NEE, a citizen of Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of Tull en 't Waal, Netherlands,
3. Sanaz BARGHI, a citizen of Iran, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of San Diego, CA,
4. Hemanth SAMPATH, a citizen of United States, 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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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 HEREBY covenant that WE will not execute any writing or do any act whatsoever conflicting with these presents.

Done at _____, on _____
LOCATION DATE

Sameer VERMANI

Done at _____, on _____
LOCATION DATE

Didier Johannes Richard VAN NEE

Done at San Diego, CA, on 09/20/2013
LOCATION DATE



Sanaz BARGHI

Done at _____, on _____
LOCATION DATE

Hemanth SAMPATH

Done at _____, on _____
LOCATION DATE

Vincent Knowles JONES, IV

16029993
081513

ASSIGNMENT

WHEREAS, WE,

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2. Didier Johannes Richard VAN NEE, a citizen of Netherlands, having a mailing address located at 5775 Morehouse Drive, San Diego, CA 92121-1714 and a resident of Tull en 't Waal, Netherlands,
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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 **SYSTEMS AND METHODS OF CONTROLLING ANTENNA RADIATION PATTERNS** (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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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;

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Done at _____, on _____
LOCATION DATE

Sameer VERMANI

Done at _____, on _____
LOCATION DATE

Didier Johannes Richard VAN NEE

Done at _____, on _____
LOCATION DATE

Sanaz BARGHI

Done at San Diego, on 10/10/2013
LOCATION DATE


Hemanth SAMPATH

Done at _____, on _____
LOCATION DATE

Vincent Knowles JONES, IV

16029993
081513

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 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

Sameer VERMANI

Done at _____, on _____
LOCATION DATE

Didier Johannes Richard VAN NEE

Done at _____, on _____
LOCATION DATE

Sanaz BARGHI

Done at _____, on _____
LOCATION DATE

Hemant Sampath

Done at San Jose CA, on 9/20/13
LOCATION DATE



Vincent Knowles JONES, IV

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