

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Stephen J. Shellhammer</td> <td>05/20/2013</td> </tr> <tr> <td>Patrick Stupar</td> <td>05/15/2013</td> </tr> <tr> <td>Nicola Varanese</td> <td>05/15/2013</td> </tr> <tr> <td>Andrea Garavaglia</td> <td>05/21/2013</td> </tr> <tr> <td>Juan Montojo</td> <td>05/15/2013</td> </tr> <tr> <td>Christian Pietsch</td> <td>05/21/2013</td> </tr> </tbody> </table>		Name	Execution Date	Stephen J. Shellhammer	05/20/2013	Patrick Stupar	05/15/2013	Nicola Varanese	05/15/2013	Andrea Garavaglia	05/21/2013	Juan Montojo	05/15/2013	Christian Pietsch	05/21/2013
Name	Execution Date														
Stephen J. Shellhammer	05/20/2013														
Patrick Stupar	05/15/2013														
Nicola Varanese	05/15/2013														
Andrea Garavaglia	05/21/2013														
Juan Montojo	05/15/2013														
Christian Pietsch	05/21/2013														
RECEIVING PARTY DATA															
Name:	QUALCOMM Incorporated														
Street Address:	5775 Morehouse Drive														
City:	San Diego														
State/Country:	CALIFORNIA														
Postal Code:	92121-1714														
PROPERTY NUMBERS Total: 2															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13875990</td> </tr> <tr> <td>Application Number:</td> <td>61748728</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13875990	Application Number:	61748728								
Property Type	Number														
Application Number:	13875990														
Application Number:	61748728														
CORRESPONDENCE DATA															
Fax Number:	4082366641														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	4082366640														
Email:	assignment@mpkpatentlaw.com														
Correspondent Name:	Mahamedi Paradice Kreisman LLP														
Address Line 1:	550 S. Winchester Blvd., Suite 605														
Address Line 2:	ATTN: Drew Herndon														
Address Line 4:	San Jose, CALIFORNIA 95128														
ATTORNEY DOCKET NUMBER:	QCA131076														

CH \$80.00 13875990

PATENT

NAME OF SUBMITTER:	Drew Herndon
Signature:	/Drew Herndon/
Date:	05/24/2013
<b>Total Attachments: 5</b> source=131076_Assignment_AF#page1.tif source=131076_Assignment_AF#page2.tif source=131076_Assignment_AF#page3.tif source=131076_Assignment_AF#page4.tif source=131076_Assignment_AF#page5.tif	

ASSIGNMENT

WHEREAS, WE,

1. **Stephen J. SHELLHAMMER**, a citizen of the United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,
2. **Patrick STUPAR**, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,
3. **Nicola VARANESE**, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,
4. **Andrea GARAVAGLIA**, a citizen of Italy, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,
5. **Juan MONTOJO**, a citizen of United States of America, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,
6. **Christian PIETSCH**, a citizen of Germany, having a mailing address located at 5775 Morehouse Drive, San Diego, California 92121-1714; and a resident of Nuremberg, Germany,

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 **PHYSICAL-LAYER CHANNEL BONDING** (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). 13/875,990 filed May 2, 2013, Qualcomm

Reference No. **131076**, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). **61/748,728**, filed **January 3, 2013**, Qualcomm Reference No. **131076P1**, (and do hereby authorize ASSIGNEE and its representative to hereafter add herein such application number(s) and/or filing date(s) when known), and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, and design applications thereof, and all issued patents of the United States which may have granted or may be granted hereafter thereon and all reissues, renewals, reexaminations, and extensions to any of the foregoing and all patents issuing thereon in the United States;

AND WE further do acknowledge and agree that WE have sold, assigned, conveyed, and transferred, and by these presents do hereby sell, assign, convey, and transfer, unto ASSIGNEE, its successors, its legal representatives, and its assigns, all rights of priority under International Conventions, Treaties, or Agreements, and the entire right, title, and interest throughout the world in said INVENTIONS, including all inventions related thereto or thereof, and all patent applications therefor that may have been filed or may be filed hereafter for said INVENTIONS in any foreign country, countries, or treaty/union organizations, and all divisional applications, renewal applications, continuation applications, continuation-in-part applications, patent of addition applications, confirmation applications, validation applications, utility model applications, and design applications thereof, and all issued patents which may have granted or may be granted hereafter for said INVENTIONS in any country or countries foreign to the United States, and all reissues, renewals, reexaminations, and extensions thereof;

AND WE DO HEREBY authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications or registrations, to issue all patents for said INVENTIONS to said ASSIGNEE, its successors, its legal representatives and its assigns, in accordance with the terms of this instrument;

AND WE DO HEREBY sell, assign, transfer, and convey to said ASSIGNEE, its successors, its legal representatives, and its assigns all claims for damages and all remedies arising out of or relating to any violation(s) of any of the rights assigned hereby that have or may have accrued prior to the date of assignment to said ASSIGNEE, or may accrue hereafter, including, but not limited to the right to sue for, seek, obtain, collect, recover, and retain damages and any ongoing or prospective royalties to which WE may be entitled, or that WE may collect for any infringement or from any settlement or agreement related to any of said patents before or after issuance;

AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, make all rightful declarations and/or oaths, and provide all lawful assistance to said ASSIGNEE, its successors, its legal representatives and its assigns, to obtain and enforce patent protection for said INVENTIONS in all countries;

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

Done at SAN DIEGO, CA, on 5/20/13  
LOCATION DATE

  
Stephen J. SHELLHAMMER

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE

Patrick STUPAR

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE

Nicola VARANESE

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE

Andrea GARAVAGLIA

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE

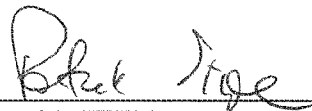
Juan MONTOJO

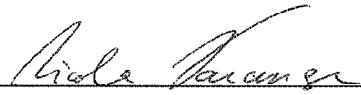
Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE

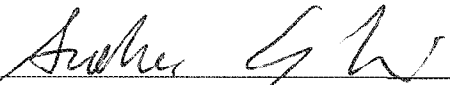
Christian PIETSCH

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.

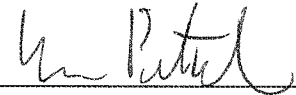
Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE  
**Stephen J. SHELLHAMMER**

Done at NUREMBERG, on 15 MAY 2013  
LOCATION DATE  
  
**Patrick STUPAR**

Done at NUREMBERG, on 15 MAY 2013  
LOCATION DATE  
  
**Nicola VARANESE**

Done at NUREMBERG, on 21 MAY 2013  
LOCATION DATE  
  
**Andrea GARAVAGLIA**

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE  
**Juan MONTOJO**

Done at Nuremberg, on 21 MAY 2013  
LOCATION DATE  
  
**Christian PIETSCH**

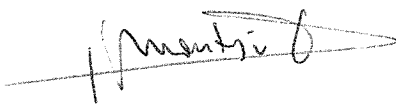
AND WE HEREBY represent that WE have full and exclusive, unencumbered right to sell, assign, convey and transfer all subject matter herein, and hereby covenant that WE have not and will not execute any writing or do any act whatsoever conflicting with these presents.

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE **Stephen J. SHELLHAMMER**

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE **Patrick STUPAR**

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE **Nicola VARANESE**

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE **Andrea GARAVAGLIA**

Done at Nimwegen, on 5/15/13  
LOCATION DATE   
**Juan MONTOJO**

Done at \_\_\_\_\_, on \_\_\_\_\_  
LOCATION DATE **Christian PIETSCH**