

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>Xiliang Luo</td> <td>05/11/2011</td> </tr> <tr> <td>Tao Luo</td> <td>05/11/2011</td> </tr> <tr> <td>Hao Xu</td> <td>05/17/2011</td> </tr> <tr> <td>Wanshi Chen</td> <td>05/17/2011</td> </tr> <tr> <td>Xiaoxia Zhang</td> <td>05/11/2011</td> </tr> <tr> <td>Peter Gaal</td> <td>05/18/2011</td> </tr> <tr> <td>Juan Montojo</td> <td>06/07/2011</td> </tr> </tbody> </table>		Name	Execution Date	Xiliang Luo	05/11/2011	Tao Luo	05/11/2011	Hao Xu	05/17/2011	Wanshi Chen	05/17/2011	Xiaoxia Zhang	05/11/2011	Peter Gaal	05/18/2011	Juan Montojo	06/07/2011
Name	Execution Date																
Xiliang Luo	05/11/2011																
Tao Luo	05/11/2011																
Hao Xu	05/17/2011																
Wanshi Chen	05/17/2011																
Xiaoxia Zhang	05/11/2011																
Peter Gaal	05/18/2011																
Juan Montojo	06/07/2011																
RECEIVING PARTY DATA																	
Name:	QUALCOMM Incorporated																
Street Address:	5775 Morehouse Drive																
City:	San Diego																
State/Country:	CALIFORNIA																
Postal Code:	92121																
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>13099210</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13099210												
Property Type	Number																
Application Number:	13099210																
CORRESPONDENCE DATA																	
Fax Number:	(858)658-2502																
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Email:	us-docketing@qualcomm.com																
Correspondent Name:	QUALCOMM Incorporated																
Address Line 1:	5775 Morehouse Drive																
Address Line 4:	San Diego, CALIFORNIA 92121																
ATTORNEY DOCKET NUMBER:	101861																
NAME OF SUBMITTER:	Gayle Gestick																

CH \$40.00 13099210

Total Attachments: 6

source=101861_2011-06-07_Signed_ASST#page1.tif

source=101861_2011-06-07_Signed_ASST#page2.tif

source=101861_2011-06-07_Signed_ASST#page3.tif

source=101861_2011-06-07_Signed_ASST#page4.tif

source=101861_2011-06-07_Signed_ASST#page5.tif

source=101861_2011-06-07_Signed_ASST#page6.tif

ASSIGNMENT

WHEREAS, WE,

1. **Xiliang Luo**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Northridge, CA**,
2. **Tao Luo**, a citizen of **Canada**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
3. **Hao Xu**, a citizen of **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. **Wanshi Chen**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
5. **Xiaoxia Zhang**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
6. **Peter Gaal**, a citizen of **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**,
7. **Juan Montojo**, a citizen of **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**,

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 **METHOD AND APPARATUS FOR CONTROL AND DATA MULTIPLEXING IN WIRELESS COMMUNICATION** (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). 13/099,210 filed May 2, 2011, Docket No. 101861, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/330,852, filed May 3, 2010, Docket No. 101861P1, together with U.S. Provisional Application No(s). 61/374,169, filed August 16, 2010, Docket No. 102671P1, (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;

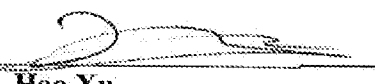
AND WE HEREBY covenant and agree that WE will communicate promptly to said ASSIGNEE, its successors, its legal representatives, and its assigns, any facts known to us respecting said INVENTIONS, and will testify in any legal proceeding, sign all lawful papers, execute all applications and certificates, 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.

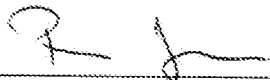
Done at San Diego, on 5/11/2011
LOCATION DATE 
Xiliang Luo

Done at San Diego, on 5/11/2011
LOCATION DATE 
Tao Luo

Done at San Diego, on 5/17/11
LOCATION DATE 
Hao Xu

Done at San Diego, on 5/17/2011
LOCATION DATE 
Wanshi Chen

Done at San Diego, on 5/11/2011
LOCATION DATE 
Xiaoxia Zhang

Done at San Diego, on May 18, 2011
LOCATION DATE 
Peter Gaal

Done at _____, on _____
LOCATION DATE Juan Montojo

ASSIGNMENT

WHEREAS, WE,

1. **Xiliang Luo**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **Northridge, CA**,
2. **Tao Luo**, a citizen of **Canada**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
3. **Hao Xu**, a citizen of **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. **Wanshi Chen**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
5. **Xiaoxia Zhang**, a citizen of **China**, having a mailing address located at **5775 Morehouse Drive, San Diego, CA 92121-1714** and a resident of **San Diego, CA**,
6. **Peter Gaal**, a citizen of **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**,
7. **Juan Montojo**, a citizen of **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**,

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 **METHOD AND APPARATUS FOR CONTROL AND DATA MULTIPLEXING IN WIRELESS COMMUNICATION** (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). 13/099,210 filed May 2, 2011, Docket No. 101861, and all provisional applications relating thereto, together with U.S. Provisional Application No(s). 61/330,852, filed May 3, 2010, Docket No. 101861P1, together with U.S. Provisional Application No(s). 61/374,169, filed August 16, 2010, Docket No. 102671P1, (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 _____, on _____
LOCATION DATE **Xiliang Luo**

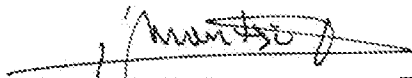
Done at _____, on _____
LOCATION DATE **Tao Luo**

Done at _____, on _____
LOCATION DATE **Hao Xu**

Done at _____, on _____
LOCATION DATE **Wanshi Chen**

Done at _____, on _____
LOCATION DATE **Xiaoxia Zhang**

Done at _____, on _____
LOCATION DATE **Peter Gaal**

Done at San Diego, on 6/7/11
LOCATION DATE 
Juan Montojo