

## 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>PENGFEI XIA</td> <td>10/25/2013</td> </tr> <tr> <td>MONISHA GHOSH</td> <td>11/14/2013</td> </tr> <tr> <td>HANQING LOU</td> <td>10/23/2013</td> </tr> <tr> <td>ROBERT L. OLESEN</td> <td>11/14/2013</td> </tr> <tr> <td>OGHENEKOME OTERI</td> <td>10/24/2013</td> </tr> </tbody> </table>		Name	Execution Date	PENGFEI XIA	10/25/2013	MONISHA GHOSH	11/14/2013	HANQING LOU	10/23/2013	ROBERT L. OLESEN	11/14/2013	OGHENEKOME OTERI	10/24/2013
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<table border="1"> <tr> <td>Name:</td> <td>INTERDIGITAL PATENT HOLDINGS, INC.</td> </tr> <tr> <td>Street Address:</td> <td>200 BELLEVUE PARKWAY</td> </tr> <tr> <td>Internal Address:</td> <td>SUITE 300</td> </tr> <tr> <td>City:</td> <td>WILMINGTON</td> </tr> <tr> <td>State/Country:</td> <td>DELAWARE</td> </tr> <tr> <td>Postal Code:</td> <td>19809</td> </tr> </table>		Name:	INTERDIGITAL PATENT HOLDINGS, INC.	Street Address:	200 BELLEVUE PARKWAY	Internal Address:	SUITE 300	City:	WILMINGTON	State/Country:	DELAWARE	Postal Code:	19809
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CORRESPONDENCE DATA													
Fax Number:	(215)568-6499												
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<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
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ATTORNEY DOCKET NUMBER:	IDC-11535US02												

CH \$40.00 14040249

NAME OF SUBMITTER:	JONATHAN G. LOMBARDO
Signature:	/Jonathan G. Lombardo/
Date:	12/19/2013
<b>Total Attachments: 7</b> source=IDC-11535US02-Executed Assignment-EFS#page1.tif source=IDC-11535US02-Executed Assignment-EFS#page2.tif source=IDC-11535US02-Executed Assignment-EFS#page3.tif source=IDC-11535US02-Executed Assignment-EFS#page4.tif source=IDC-11535US02-Executed Assignment-EFS#page5.tif source=IDC-11535US02-Executed Assignment-EFS#page6.tif source=IDC-11535US02-Executed Assignment-EFS#page7.tif	

## ASSIGNMENT

Pengfei Xia, residing at 4180 Misty Ridge, San Diego, California 92130, the United States of America, a citizen of China; Monisha Ghosh, residing at 569 Millwood Road, Chappaqua, New York 10514, the United States of America, a citizen of the United States of America; Hanqing Lou, residing at 39 Mineola Boulevard, #3H, Mineola, New York 11501, the United States of America, a citizen of China; Robert L. Olesen, residing at 3 Country Club Drive, Huntington, New York 11743, the United States of America, a citizen of the United States of America; and Oghenekome Oteri, residing at 8451 Christopher Ridge Terrace, San Diego, California 92127, the United States of America, a citizen of Nigeria (hereafter jointly and severally referred to as the undersigned), are the inventors of

**METHOD FOR WIFI BEAMFORMING, FEEDBACK, AND SOUNDING (WIBEAM)** for which the undersigned have executed an application for United States Letters Patent, U.S. Patent Application No. 14/040,249, filed September 27, 2013.

InterDigital Patent Holdings, Inc., a Delaware corporation, having a place of business at 200 Bellevue Parkway, Suite 300, Wilmington, Delaware 19809, USA, (hereafter referred to as the assignee), is desirous of acquiring the entire right, title and interest in said invention, all applications for and all letters patent issued on said invention.

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to the assignee and assignee's successors, assigns and legal representatives the entire right, title and interest in said invention and all patent applications thereon, including, but not limited to, the application for United States Letters Patent entitled as above, and all divisions and continuations thereof, and in all letters patent, including all reissues and reexaminations thereof, throughout the world, including the right to claim priority under the Paris Convention or other treaty.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention throughout the world for the benefit of the assignee, and to execute all instruments proper to carry out the intent of this instrument.

The undersigned warrant that the rights and property herein conveyed are free and clear of any encumbrance.

AND this Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment. Additionally, we hereby authorize our attorneys to collect the signature pages of each executed counterpart and to attach those signature pages to a single copy of this instrument, which single copy and attached signature pages together shall constitute an original of this Assignment.

Date

10/25/13

Pengfei Xia

9710 Scranton Road, #250  
San Diego, CA 92121, USA

Signed at

(City and Country)

STATEMENT OF WITNESS: I, \_\_\_\_\_

Julie McDonough

9710 Scranton Road, #250  
San Diego, CA 92121, USA

whose full address is:

Address of Witness

was personally present and did see Pengfei Xia execute this  
Assignment on the 25<sup>th</sup> day of October, 2013 and such Assignor is  
personally known to me to be the person described herein.

Julie McDonough  
Signature of Witness

Nov 14, 2013  
Date

Monisha Ghosh  
Monisha Ghosh

Signed at Melville, NY USA  
(City and Country)

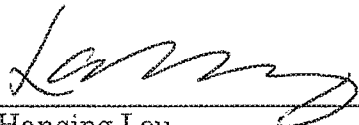
STATEMENT OF WITNESS: I, Migaly Lopez  
Name of Witness

whose full address is: 2 Huntington Quadrangle, 4th Fl/South Wing  
Melville, NY 11747 USA  
Address of Witness

was personally present and did see Monisha Ghosh execute this  
Assignment on the 14 day of November, 2013 and such Assignor is  
personally known to me to be the person described herein.

[Signature]  
Signature of Witness

10/23/2013  
Date

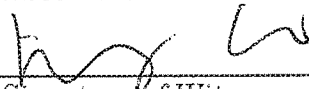
  
Hanqing Lou

Signed at Mineola, US  
(City and Country)

STATEMENT OF WITNESS: I, Huiyong Liao  
Name of Witness


whose full address is: 39 Mineola Blvd, #3H, Mineola, NY 11501  
Address of Witness

was personally present and did see Hanqing Lou execute this  
Assignment on the 23rd day of October, 2013 and such Assignor is  
personally known to me to be the person described herein.

  
Signature of Witness

Date

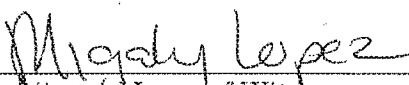
11-14-13

  
Robert L. Olesen

Signed at

Melville, NY USA  
(City and Country)

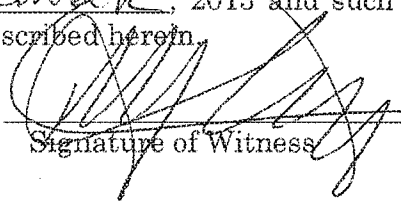
STATEMENT OF WITNESS: I, Miguel Lopez

  
2 Huntington Quadrangle, 4th Fl South Wing  
Melville, NY 11747 USA


whose full address is:

Address of Witness

was personally present and did see Robert L. Olesen execute this Assignment on the 14 day of November, 2013 and such Assignor is personally known to me to be the person described herein.

  
Signature of Witness

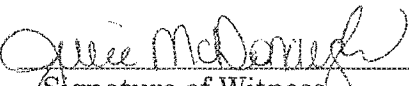
10/24/2013  
Date

  
Oghenekome Oteri

Signed at 9/10 Scranton Road, #250  
San Diego, CA 92121, USA  
(City and Country)

STATEMENT OF WITNESS: I, Julie McDonough  
Name of Witness  
whose full address is: 9/10 Scranton Road, #250  
San Diego, CA 92121, USA  
Address of Witness

was personally present and did see Oghenekome Oteri execute this  
Assignment on the 24<sup>th</sup> day of October, 2013 and such Assignor is  
personally known to me to be the person described herein.

  
Signature of Witness