PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Sung Hyuk Shin	06/17/2010
Guodong Zhang	06/16/2010
Janet A Stern-Berkowitz	06/16/2010
Philip J Pietraski	06/16/2010
Stephen G Dick	06/24/2010
Joseph S Levy	06/16/2010
Kyle Jung-Lin Pan	06/16/2010
Erdem Bala	06/16/2010
Marian Rudolf	06/18/2010
Stephen Terry	06/28/2010
Chang-Soo Koo	06/17/2010
Charles A Dennean	06/16/2010
Eldad M Zeira	06/28/2010

RECEIVING PARTY DATA

Name:	InterDigital Patent Holdings, Inc.	
Street Address:	3411 Silverside Road	
Internal Address:	Concord Plaza, Suite 105, Hagley Building	
City:	Wilmington	
State/Country:	DELAWARE	
Postal Code:	19810	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12703092

CORRESPONDENCE DATA

Fax Number: (215)568-3439

PATENT REEL: 024653 FRAME: 0939 1 \$40.00 1270309

501226873

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 215-568-3100

Email: madevine@woodcock.com

Correspondent Name: Vincent J. Roccia
Address Line 1: 2929 Arch Street
Address Line 2: Cira Center, 12th Floor

Address Line 4: Philadelphia, PENNSYLVANIA 19104

ATTORNEY DOCKET NUMBER:	ILTE-0419/IPH-2-2277US02
NAME OF SUBMITTER:	Vincent J. Roccia

Total Attachments: 15
source=Assignment#page1.tif
source=Assignment#page2.tif
source=Assignment#page3.tif
source=Assignment#page4.tif
source=Assignment#page5.tif
source=Assignment#page6.tif
source=Assignment#page7.tif
source=Assignment#page8.tif
source=Assignment#page9.tif
source=Assignment#page10.tif
source=Assignment#page11.tif
source=Assignment#page12.tif

source=Assignment#page13.tif source=Assignment#page14.tif source=Assignment#page15.tif

> PATENT REEL: 024653 FRAME: 0940

PATENT
Joint Inventors
(Pending Application;
Application No.: 12/703,092)

ASSIGNMENT

WHEREAS, we Sung-Hyuk Shin, Guodong Zhang, Janet A. Stern-Berkowitz, Philip J. Pietraski, Stephen G. Dick, Joseph S. Levy, Kyle Jung-Lin Pan, Erdem Bala, Marian Rudolf, Stephen E. Terry, Chang-Soo Koo, Charles A. Dennean and Eldad M. Zeira, hereinafter referred to as the assignors, residing respectively at 104 Eidner Way, Northvale, NJ 07647; 14 Walnut Drive, Syosset, NY 11791; 41-20 Glenwood Street, Little Neck, NY 11363; 7 Talbot Place, Huntington Station, NY 11746; 61 Bobann Drive, Nesconset, NY 11767; 26 East Webster Street, Merrick, NY 11566; 43 Avalon Circle, Smithtown, NY 11787; 17 Hallock Street, Floor #2, Farmingdale, NY 11735; 525 Lucien L'Allier, Apartment #204, Montreal, QC H3C 4L3; 15 Summit Avenue, Northport, NY 11768; 281 Altessa Boulevard, Melville, NY 11747; 53 Vermont Street, Meiville, NY 11747; and 106 East Neck Road, Huntington, NY 11743 are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Application No. 12/703,092, filed February 9, 2010, entitled APPARATUS AND METHOD FOR UPLINK POWER CONTROL FOR WIRELESS TRANSMITTER/RECEIVER UNIT UTILIZING MULTIPLE CARRIERS: and

WHEREAS, Interdigital Patent Holdings, Inc., hereinafter referred to as the assignee, of 3411 Silverside Road, Concord Plaza, Suite 105, Hagley Building, Wilmington, DE 19810, a corporation of Delaware, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound hereby, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, including the full right to sue for and collect damages for past violations of provisional rights having arisen from any publication of said application or any continuations, divisions, or renewals of or substitutes for said application. We further assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives. to the full end of the term or terms for which said Letters Patent respectively may be granted. reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

PATENT Joint Inventors (Pending Application; Application No.: 12/703,092)

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks 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 as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

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.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

Date

Sung-Hyuk Shin

STATE OF

COUNTY OF

On this / day of / , year of / before me personally came the above named / O H () to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

Guodong Zhang

(L.S.)

COUNTY OF

On this / day of / year of coo, before me personally came the above named / () day of / day of to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

MAUREEN BORRERO

Notary Public - State of New York No. 01806145147 Qualified in Suffolk County

Commission Expires May 1, 2014

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

<u>/6 June 26/0</u>

anet A. Stern-Berkowitz

STATE OF

COUNTY OF SLAFOL

On this day of the personally came the above named to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

1/2 1/10 2010

Philip J. Pjetraski

__(L.S.)

STATE OF A

COUNTY OF

On this day of year of before me personally came the above named to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Tidowy T HOTTO

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

21 Juli 2010

Stephen G. Dick

_(L.S.)

STATE OF

COUNTY OF

<u> 44624 n</u>

On this day of year of , before me personally came the above named to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

2,000, 1 00,0

MAUREEN BOUNERO Notory Public - State of New York No. 01806145147

Qualified in Sulfolk County Commission Expires May 1, 2014

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

16 444 2010 Date

Joseph S. Levy

(L.S.)

STATE OF

COLDIER OF

: SS

COUNTY OR \\\

On this / day of / year of / before me personally came the above named to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

16 June 2010

Kyle Jung-Lin Pan

(L.S.)

STATE OF

COUNTY OF

On this 6 day of 7, year of 6, before me personally came the above named 6, or form to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

COUNTY OF

On this

day of June, year of 200 before me personally came the to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

DOCKET NO.: ILTE-0419/IPH-2-2	2277US02	PATENT Joint Inventors (Pending Application; Application No.: 12/703,092)	
<u> Juna (8a 2010</u> Date	Marian Rudolf	1 (LS)	
STATEMENT OF WITNESS		*	
SIGNED at <u>MONTREAL</u> (Cit)	OUEBEC	CANADA (Country)	
Thisday of			
I, JAVINA	Teichaon	whose full	
residence address is	LACS SMET !	APT 34 MONTHER	9 (L.
QL H2T 306			
was personally present and did see it was personally present and did see it was 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	o, and such assignor is	tie the above assignment on the spersonally known to me to be	
	1 / Le	and -	
$\overline{\mathbf{s}}$	ignature of Witness		

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

Stephen Terry

W. year of ____, before me personally came the day of to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

1/1 JUNE 20

Chang-Soo Koo

ATE OF/UW YOU

COUNTY OR JULY TO L

On this day of to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

PATENT

Joint Inventors

(Pending Application;

Application No.: 12/703,092)

16 Jul 2010

Charles A. Dennean

orate or/

COUNTY OF

On this / (a day of) , year of 2010, before me personally came the above named / (a) / (b) / (c) / (c

Notary Public

DOCKET NO.: ILTE-0419/IPH-2	-2277US02 PATENI
	Joint Inventors
	/ / (Pending Application
	Application No.: 12/703,092
AS THER OWN	
<u>ak our auu</u>	(L.S.)
Date	Eldad M. Zeira

COUNTY OF SUHFOLK:

On this day of to me personally came the above named to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

Notary Public

MAUREEN BORRERO
Notary Public - State of New York
No. 01806145147
Qualified in Suffolk County
Commission Expires May 1, 2014

RECORDED: 07/08/2010