PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the 6th inventor on Assignment Zhan, Hai, date executed 09/01/2011 previously recorded on Reel 024907 Frame 0778. Assignor(s) hereby confirms the Assignment.

CONVEYING PARTY DATA

Name	Execution Date
Ting He	08/31/2011
Kang-Won Lee	08/31/2011
Yong Hua Lin	09/01/2011
Qing Wang	09/01/2011
Murtaza Zafer	08/31/2011
Hai Zhan	09/01/2011

RECEIVING PARTY DATA

Name:	International Business Machines Corporation
Street Address:	New Orchard Road
City:	Armonk
State/Country:	NEW YORK
Postal Code:	10504

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13328259

CORRESPONDENCE DATA

(860)286-0115 nroach@cantorcolburn.com ent to the e-mail address first; if that is unsuccessful, it will be sent
Cantor Colburn, LLP
20 Church Street
22nd Floor
Hartford, CONNECTICUT 06103

OP \$40.00 13328259

ATTORNEY DOCKET NUMBER:	YOR920110396US1
NAME OF SUBMITTER:	Anne Davis Barry
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DECEMBER 19, 2011

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CANTOR COLBURN, LLP 20 CHURCH STREET 22ND FLOOR HARTFORD, CT 06103

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RECORDATION DATE: 12/16/2011

REEL/FRAME: 027399/0536 NUMBER OF PAGES: 8

DOC DATE: 08/31/2011

DOC DATE: 08/31/2011

DOC DATE: 09/01/2011

DOC DATE: 09/01/2011

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: YOR920110396US1

ASSIGNOR: HE, TING

ASSIGNOR: LEE, KANG-WON

ASSIGNOR: LIN, YONG HUA

ASSIGNOR: WANG, QING

ASSIGNOR: ZAFER, MURTAZA ASSIGNOR: ZHAN, HAI ASSIGNEE: INTERNATIONAL BUSINESS MACHINES CORPORATION NEW ORCHARD ROAD

ARMONK, NEW YORK 10504

DOC DATE: 08/31/2011 * Missing when DOC DATE: 09/01/2011 Add first recorded (12/16/11)

P.O. Box 1450, Alexandria, Virginia 22313-1450 - WWW.USPTO.GOV

APPLICATION NUMBER: 13328529 FILING DATE: PATENT NUMBER: ISSUE DATE: TITLE: SEMICONDUCTOR PACKAGE MANUFACTURING METHOD AND SEMICONDUCTOR PACKAGE

ASSIGNMENT RECORDATION BRANCH PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYP	E:	NEW ASSIGNMENT			
NATURE OF CON	VEYANCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PAR	TY DATA				
		Name	Execution Date		
Ting He			08/31/2011		
Kang-Won Lee			08/31/2011		
Yong Hua Lin			09/01/2011		
Qing Wang			09/01/2011		
Murtaza Zafer		292-20-2 495 507 2010 (1910) (190) (1910) (1	08/31/2011		
RECEIVING PART					
	International Business Machines Corporation				
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City:	New Orchar Armonk	d Road			
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Address Line 4: Hartford, CONNECTICUT 06103		
ATTORNEY DOCKET NUMBER:	YOR920110396US1	
NAME OF SUBMITTER:	Anne Davis Barry	
Signature:	/Anne Davis Barry/	
Date:	12/16/2011	
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RECEIPT INFORMATION		
EPAS ID: PAT1791 Receipt Date: 12/16/207 Fee Amount: \$40		

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the Invention:

QUASI-DYNAMIC SPECTRUM ACCESS FOR INTERNET OF THINGS (IOT) APPLICATIONS

and further identified by the IBM Docket Number provided above in the header of this Assignment, for which an application for a United States Patent was executed concurrently herewith or was filed having:

Serial Number: 13/328, 259 (insert series code and serial number here if/when available)

Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned Inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right. title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made: and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives. and assigns, whenever requested by IBM, its successors, legal representatives, or assigns,

Each undersigned Inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned Inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent application Serial Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

[Inventor Signature Page(s) Follows]

Page 1 of 3

Executed by Inventor 1				
Signature: _	Ting He	Date: <u>93/31/2011</u>		
	Execute	1 by Inventor 2		
Signature:	<u>Lic Kang Won</u> Kang-Won Lee	Date:DAT / 2011		
	Executed	t by Inventor 3		
Signature:	Yong Hua Lin	Date:		
	Executed	l by Inventor 4		
Signature:	Qing Wang	Date:		
	Executed	by Inventor 5		
Signature:	Murjaza Zafer	Date: 8/31/2011		
	Paş	ge 2 of 3		

Executed by Inventor 5

Signature: _____ Date: _____ Date: _____

Page 3 of 3

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the Invention:

QUASI-DYNAMIC SPECTRUM ACCESS FOR INTERNET OF THINGS (IOT) APPLICATIONS

and further identified by the IBM Docket Number provided above in the header of this Assignment, for which an application for a United States Patent was executed concurrently herewith or was filed having:

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Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned Inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned Inventor ("ASSIGNOR") hereby sells, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned Inventor hereby authorizes and requests the Director of the United States. Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned Inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

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[Inventor Signature Page(s) Follows]

Page 1 of 3

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IBM DOCKET NUMBER: YOR920110396US1 Executed by Inventor 1 Signature: Date: Ting He **Executed by Inventor 2** Signature: Date: Kang-Won Lee **Executed by Inventor 3** ighua 2011 Signature: Date: Yong Hua Lin Executed by Inventor 4 3 201 Signature: Date: Qing Wang Executed by Inventor 5 Signature: Date: Murtaza Zafer Page 2 of 3 XV3 17:27 6102 71/82 PATENT 800 🕅

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