PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jinwoo Choi	11/18/2010
Sungjun Chun	11/18/2010
Jason L. Frankel	11/19/2010
Paul R. Walling	11/18/2010
Roger D. Weekly	11/18/2010

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:	12952152

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	AUS920090139US1	
NAME OF SUBMITTER:	Amy J. Pattillo	

PATENT

REEL: 025755 FRAME: 0619

840.00 129

Total Attachments: 4

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> PATENT REEL: 025755 FRAME: 0620

IBM DOCKET NUMBER: [AUS920090139US1]

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: [CROSSTALK REDUCTION BETWEEN SIGNAL LAYERS IN A MULTILAYERED PACKAGE BY VARIABLE-WIDTH MESH PLANE STRUCTURES]

and further identifi which an application	ed by the IBM D on for a United S	Docket Number provided above in the header of this Assignment, for itates Patent was executed concurrently herewith or was filed having:
Application No.: _	10/050 150	(insert series code /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 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]

IBM DOCKET NUMBER: JAUS920090139US1]

Executed by Inventor 1					
Signature:	(Jinwoo Choi)	<i>1/44/47</i> 2	Date:	11/10/10	
		Executed by Inver	ntor 2		·····
Signature:	(Sungjun Chun)		Date:	11/18/2019	
		Executed by Inven	tor 3		
Signature: _	(Jason L. Frankel)		Date:		
		Executed by Inven	tor 4		
Signature: _	(Paul R. Walling)		Date:	1) //8/2015	
		Executed by Inven	tor 5		······································
Signature: _	(Roger D. Weekly)	<u> Mary</u>	_ Date:	11/18/1218	

Page 2 of 2

<u>ASSIGNMENT</u>

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

Utile of the Invention: [CROSSTALK REDUCTION BETWEEN SIGNAL LAYERS IN A MULTILAYERED PACKAGE BY VARIABLE-WIDTH MESH PLANE STRUCTURES]

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:

12/952.152

Application No.: 12/952,152 (insert series code /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 fiting 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 unencombered 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 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]

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IBM DOCKET NUMBER: [AUS920090139US1]

Execute	d by Inventor 1	
Signature:(Jinwoo Choi)	Date:	
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Executed	l by Inventor 2	***************************************
Signature:(Sungjun Chun)	Date:	
Executed	by Inventor 3	
Signature: (Jason L. Frankel)	Date:	
Executed	by Inventor 4	
Signature:(Paul R. Walling)	Date:	
Executed §	y Inventor 5	· · · · · · · · · · · · · · · · · · ·
ignature:(Roger D. Weekly)	Date:	
Page	2 of 2	

Assignment Form, Rev2 (Updated 09/01/2009)

PATENT REEL: 025755 FRAME: 0624