#### 503494213 09/24/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3540838

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JAE WOONG NAH	08/30/2013
DA YUAN SHIH	08/12/2014

### **RECEIVING PARTY DATA**

Name:	INTERNATIONAL BUSINESS MACHINES CORPORATIOIN
Street Address:	NEW ORCHARD ROAD
City:	ARMONK
State/Country:	NEW YORK
Postal Code:	10564

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14012785

## CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER: YOR920100327US2(14-27-01)	
NAME OF SUBMITTER:	ROBERT J. EICHELBURG
SIGNATURE:	/Robert J. Eichelburg/
DATE SIGNED:	09/24/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

## **Total Attachments: 8**

source=YOR920100327US2\_ResubmissionofDeclarationandAssignment\_092415#page1.tif source=YOR920100327US2 ResubmissionofDeclarationandAssignment 092415#page2.tif source=YOR920100327US2 ResubmissionofDeclarationandAssignment 092415#page3.tif

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Divisional Application of:	)
Jae-Woong NAH and	)
Da-Yuan SHIH	) Group Art Unit: 2812; (Parent Application)
Serial No.: 14/012,785	) Examiner: Alexander G. Ghyka; (Parent
Filed: August 28, 2013	) Application)
	)
Serial No.: Parent Application 13/078,807	)
Filed: Parent Application April 1, 2011	)
	)
For: COPPER POST SOLDER BUMPS ON SUBSTRATE	
Mail Stop Missing Parts	
Assistant Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22314-1450	
Sir:	

## SUBMISSION OF FULLY EXECUTED DECLARATION AND ASSIGNMENT

Applicants submit the attached Declaration and assignment executed by inventors Dr. Jae-Woong NAH (signed August 30, 2013) and Dr. Da-Yuan SHIH (signed August 12, 2014).

By submitting this Declaration and assignment applicants do not disclaim, abandon, or forfeit any invention directly or indirectly in any of the claims originally presented in the Parent Application, other applications based on the parent application, or the written Description, abstract of the disclosure, and drawings of the Parent Application, other

Divisional Application Serial No. 14/012,785 Submission of Fully Executed Declaration

Docket No. YOR920100327US2 (14-27-01) Customer Number 68,397

applications based on the parent application, and this application, and specifically preserve

all and any inventions embodied not only by the claims of these applications, but also the

specification and drawings of the Parent Application, other applications based on the parent

application, and this application for prosecution in any patent application filed for these

inventions prior to or subsequent to the submission and/or entry of this Declaration and

assignment.

If filing this Declaration and assignment requires the payment of any fees not

accounted for, the undersigned attorney for applicants also requests payment of these fees

from Deposit account 50-0510, and the refund of any fees to this Deposit account. The

undersigned attorney for applicants is authorized to use this Deposit Account.

Respectfully Submitted,

The Law Offices of Robert J. Eichelburg

By: /Robert J. Eichelburg/ Robert J. Eichelburg, Reg. No. 23, 057

Dated: September 24, 2015.

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# DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

Title of Invention: COPPER POST SOLDER BUMPS ON SUBSTRATES

As a below named and undersigned inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

[ ] United States application or PCT international application number 14/012,785 filed on August 28, 2013.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, I ("ASSIGNOR") have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;

Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or

Page 1 of 4

perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

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(1) Legal Name of Inventor: Jae-Woong Nah

Signature:

Date: 00/20/20/

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# DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

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Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or

Page 1 of 4

perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Page 2 of 4

m	Legal Name of	Inventor	Da-Yuan	Shih
m	i easi Name di	mvenor.	La-i wan	OHILL:

Signature:

Date:

Page 4 of 4

PATENT

REEL: 036647 FRAME: 0525

RECORDED: 09/24/2015