#### 01/13/2017 504177295

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4223973

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GRISELDA BONILLA	01/28/2016
SAMUEL S. CHOI	01/18/2016
RONALD G. FILIPPI	01/19/2016
ELBERT E. HUANG	01/22/2016
NAFTALI E. LUSTIG	01/17/2016
ANDREW H. SIMON	01/22/2016

### **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:	15405344

#### **CORRESPONDENCE DATA**

Fax Number: (860)286-0115

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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

Phone: 860 286 2929

Email: usptopatentmail@cantorcolburn.com

**Correspondent Name:** CANTOR COLBURN LLP 20 CHURCH STREET Address Line 1:

Address Line 2: 22ND FLOOR

Address Line 4: HARTFORD, CONNECTICUT 06103

ATTORNEY DOCKET NUMBER:	FIS920150191US3
NAME OF SUBMITTER:	TARA C. STUART
SIGNATURE:	/taracstuart/
DATE SIGNED:	01/13/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

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REEL: 040964 FRAME: 0438 504177295

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PATENT REEL: 040964 FRAME: 0439

Title of Invention: INTERCONNECT SCALING

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
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 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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(1)	Legal Name of Inventor:	GRISELDA BONILLA		
	Signature:	Ble	Date: 01 28 201	6_
(2)	Legal Name of Inventor:	SAMUEL S. CHOI		
	Signature:		_Date:	, <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
(3)	Legal Name of Inventor:	RONALD G. FILIPPI		
	Signature:		Date:	
(4)	Legal Name of Inventor:	ELBERT E. HUANG		
	Signature:		Date:	

[IF MORE INVENTORS, ADDITIONAL SIGNATURE PAGE(S) FOLLOWS]

(5) Legal Name of Inventor: NAFTALI E. LUSTIG		
Signature:	Date:	
(6) Legal Name of Inventor: ANDREW H. SIMON		
Signature	Date:	

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(1)	Legal Name of Inventor:	GRISELDA, BONILLA	
	Signature:		Date:
(2)	Legal Name of Inventor:	SAMUEL S. CHOI	
	Signature:	C La	Date: Jun 18, 2016
(3)	Legal Name of Inventor:	RONALD G. FILIPPI	
	Signature:		Date:
(4)	Legal Name of Inventor:	ELBERT E. HUANG	
	Signature:	MONOMENT OF THE PROPERTY OF TH	Date:

[IF MORE INVENTORS, ADDITIONAL SIGNATURE PAGE(S) FOLLOWS]

Page 2 of 3

(5) Legal Name of Inventor: NAFTALI E. LUSTIG		
Signature:	Date:	
(6) Legal Name of Inventor: <b>ANDREW H. SIMON</b>		
Signature:	Date:	

## 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: INTERCONNECT SCALING

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I am aware of the duty to disclose to the United States Patent and Trademark Office all information	

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(1) Local Name of Inventors CDISCLINA DOMINITA

(1,	GRISELDA. BUNILLA	
	Signature:	Date:
(2)	Legal Name of Inventor: SAMUEL S. CHOI	
	Signature:	Date:
(3)	Legal Name of Inventor: RONALD G. FILIPPI	
	Signature: Ronald D'anlippi	Date: //19/16
(4)	Legal Name of Inventor: ELBERT E. HUANG	
	Signature:	Date:

[IF MORE INVENTORS, ADDITIONAL SIGNATURE PAGE(S) FOLLOWS]

Page 2 of 3

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IBM DOCKET NUMBER: F18920150191US1

(5) Logal Name of Inventor: NAFTALLE. LUSTIG	
Signature:	Dato;
(6) Legal Name of Inventor: ANDREW H. SIMON	
Signature:	Date

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	Signature:	Date:
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	Signature:	Date:
(3)	Legal Name of Inventor: RONALD G. FILIPPI	
	Signature:	Date:
(4)	Legal Name of Inventor: ELBERT E. HUANG	
	Signature: 2x11	Date: 1/22/16

[IF MORE INVENTORS, ADDITIONAL SIGNATURE PAGE(S) FOLLOWS]

(5) Legal Name of Inventor: NAFTALI E. LUSTIG	
Signature:	Date:
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Signature:	Date:

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(1) Legal Name of Inventor: GRISELDA. BONILL	A.
Signature:	Date:
(2) Legal Name of Inventor: SAMUEL S. CHOI	
Signature:	Date:
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Signature:	Date:
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Signature:	Date:

[IF MORE INVENTORS, ADDITIONAL SIGNATURE PAGE(S) FOLLOWS]

Page 2 of 3

(5)	Legal Name of Inventor: NAF	TALI E. LUSTIG		
	Signature: A WHW	E. June	Date:	1/17/16
<b>(6)</b>	Legal Name of Inventor: AND	DREW H. SIMON		. (
(0)	Legal Ivanie of Inventor. All D	ALEW III. SIMION		
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	Signature:	Date:	
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	Signature:	Date:	

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(5) Legal Name of Inventor: NAFTALI E. LUSTIG	
Signature:	Date:
(6) Legal Name of Inventor: ANDREW H. SIMON	
Signature: Androw H Amor-	Date: Ja 22, 2016

Page 3 of 3

PATENT REEL: 040964 FRAME: 0457