503694443 02/16/2016

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT3741081

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: CORRECTIVE ASSIGNMENT

NATURE OF CONVEYANCE: Corrective Assignment to correct the ASSIGNOR'S DOC DATE previously recorded on Reel 037025 Frame 0525. Assignor(s) hereby confirms the

ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
ALBERTO GIAMMARIA	11/12/2015
SHANTANU GODBOLE	11/10/2015
KARTHIKEYAN PONNALAGU	11/12/2015
KARTHIK SANKARANAYANAN	11/10/2015

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:	14939318

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: IN920150174US1

NAME OF SUBMITTER: MICHAEL J. COOPER

SIGNATURE: /Michael J. Cooper/

DATE SIGNED: 02/16/2016

This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT REEL: 037835 FRAME: 0857

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Total Attachments: 12 source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page1.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page2.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page3.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page4.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page5.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page6.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page7.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page8.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page9.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page10.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page11.tif source=IN920150174US1_CorrectiveFiledAssignment_2-16-2016#page11.tif

PATENT REEL: 037835 FRAME: 0858 FORM PTO-1595

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U.S. DEPARTMENT OF COMMERCE

(Rev.6-93) **Patent and Trademark Office** To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) Alberto Giammaria, Shantanu Godbole, Karthikevan Ponnalagu, and Karthik Name: International Business Machines Corporation Sankaranarayanan Additional name(s) of conveying party(ies) attached? **Internal Address:** Yes X No Street Address: New Orchard Road 3. Nature of conveyance: _ Merger X Assignment City: Armonk State: NY **ZIP: 10504** Security Agreement Change of Name Additional name(s) & address(es) attached? Yes X No **Execution Date: November 12, 2015, November 10,** 2015, November 12, 2015, November 10, 2015 November 12, 2005

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 14/939,318 Filed November 12, 2015 B. Patent No.(s) Additional numbers attached? __ Yes X No 5. Name and address of party to whom 6. Total number of applications and patents correspondence concerning document should be involved: mailed: 7. Total Fee (37 CFR 3.41)..... \$ 40.00 Name: Michael J. Cooper **Enclosed** Internal Address: Ryan, Mason & Lewis, LLP Authorized to be charged to deposit account Street Address: 1175 Post Road East, Second Floor City: Westport State: CT ZIP: 06880 8. Deposit account number 09-0441 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Michael J. Cooper November 12, 2015 Reg. No. 57,749 Total number of pages including cover sheet, attachments, and document: 6

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IN920150174US1

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:

REPEAT EXECUTION OF ROOT CAUSE ANALYSIS LOGIC THROUGH RUN-TIME DISCOVERED TOPOLOGY PATTERN MAPS

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 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, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and I desire to grant to IBM, 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 ("ASSIGNOR") hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to IBM (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 IBM, its successors, legal representatives, and assigns, my 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 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 IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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.

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.

(1) Legal Name of Inventor: Albe	erto Giammaria
Signature: Abers (journois Date: 11/12/2015
(2) Legal Name of Inventor: Sha	ntanu Godbole
Signature:	Date:
(3) Legal Name of Inventor: Kar	thikeyan Ponnalagu
Signature:	Date:
(4) Legal Name of Inventor: Kar	thik Sankaranarayanan
Signature:	Date:

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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.

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(1) Legal Name of Inventor: Alberto	Giammaria		¥
	q.		5
Signature:		Date:	· .
:	*		
(2) Legal Name of Inventor: Shantan	iu Godbole		4
Signature:	anfold	-10	Nov. 201
Signature:	7	Date:	
(3) Legal Name of Inventor: Karthike	eyan Ponnalagu		9
in,			•
Signature:	*	Date:	
A	ur Sa Sa Sa Sag	es:	
(4) Legal Name of Inventor: Karthik	Sankaranarayanan		s K
			** **
Signature:	·	Date:	<u>. </u>

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I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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.

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.

(1)	Legal Name of Inventor: Alberto Giammaria		
	Signature:	_ Date:	
(2)	Legal Name of Inventor: Shantanu Godbole		
		a .	
*	Signature:	_ Date:	
(3)	Legal Name of Inventor: Karthikeyan Ponnalagu	:	
	Signature: PMmh)(eye-	Date: 12/11/2015	خبي <u>د</u>
(4)	Legal Name of Inventor: Karthik Sankaranarayanan		
	Signature:	_ Date:	

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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.

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(1) Legal Name of Inventor: Alberto Giammuria	
Signature:	Date:
(2) Legal Name of Inventor: Shantanu Godbole	
Signature:	Date:
(3) Legal Name of inventor: Karthikeyan Ponnalagu	
Signature:	Date:
(4) Legal Name of Inventor: Karthik Sankaranarayanan	
(4) Legal Name of Inventor: Karthik Sankaranarayanan Signature	Date: 10/November/2015

Page 2 of 2

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RECORDED: 02/16/2016 REEL: 037835 FRAME: 0864