504335928 04/25/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4382616

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SAMUEL M. JAWAHARLAL	04/13/2017
ARUNACHALAM NARAYANAN	04/14/2017
SATHYA SANTHAR	04/13/2017
BALAMURUGARAMANATHAN SIVARAMALINGAM	04/19/2017

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:	15496020

CORRESPONDENCE DATA

Fax Number: (518)452-5579

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.

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Email: sandy.light@hrfmlaw.com

Correspondent Name: HESLIN ROTHENBERG FARLEY & MESITI PC

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Address Line 4: ALBANY, NEW YORK 12203

ATTORNEY DOCKET NUMBER: IN920160355US1	
NAME OF SUBMITTER: MATTHEW M. HULIHAN	
SIGNATURE:	/Matthew M. Hulihan/
DATE SIGNED:	04/25/2017
This document serves as an Oath/Declaration (37 CFR 1.63).	

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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: CRYPTOGRAPHY USING MULTI-FACTOR KEY SYSTEM AND FINITE STATE MACHINE

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 referre to as the "Invention") disclosed in the above-identified patent application and further identified by the

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;

IBM Docket Number provided above in the header of this document;

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.

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

(H0847288.1) Page 1 of 2

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.

(1) Legal Name of Inventor: Samuel M. JAWAHARLAL

	Signature: V Saml Methy	Date: 13 - APR - 2017
(2)	Legal Name of Inventor: Arunachalam NARAYANAN	
	Signature:	Date:
(3)	Legal Name of Inventor: Sathya SANTHAR	
	Signature:	Date:
(4)	Legal Name of Inventor: Balamurugaramanatha SIVARAMALING	АМ
	Signature:	Date:

(H0847288.1) Page 2 of 2

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(H0847288.1)Page 1 of 2

PATENT

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(1)	Legal Name of Inventor: Samuel M. JAWAHARLAL	
	Signature:	Date:
(2)		
(2)	Legal Name of Inventor: Arunachalam NARAYANAN	
	Signature:	Date: LY APT 187
(3)	Legal Name of Inventor: Sathya SANTHAR	
	Signature:	Date:
(4)	Legal Name of Inventor: Balamurugaramanatha SIVARAMALING	GAM
	Signature:	_ Date:

(H0847288.1)Page 2 of 2

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(1) Legal Name of Inventor: Samuel M. JAWAH	ARLAL
Signature:	Date:
(2) Legal Name of Inventor: Arunachalam NARA	AYANAN
Signature:	Date:
(3) Legal Name of Inventor: Sathya SANTHAR	
Signature:	Date: <u>April 13, 2017</u>
(4) Legal Name of Inventor: Balamurugaramana	tha SIVARAMALINGAM
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(4)	Legal Name of Inventor: Balamurugaramanathan SIVARAMALIN	GAM	
	Signature: 1. Balamungar.	Date:_	19/04/2017

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RECORDED: 04/25/2017