09/13/2014 502974886

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3021485

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL POPLAVSKI	08/26/2014
SCOTT SCHUMACHER	08/26/2014
PRACHI SNEHAL	08/27/2014
SEAN J. WELLECK	08/26/2014
ALAN XIA	08/26/2014
YINLE ZHOU	08/27/2014

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:	14485667

CORRESPONDENCE DATA

Fax Number: (407)343-7587

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: 4073437586

Email: mld@mindspring.com

LAW OFFICE OF MARCIA L. DOUBET, P. L. **Correspondent Name:**

Address Line 1: P.O. BOX 422859

Address Line 4: KISSIMMEE, FLORIDA 34742-2859

ATTORNEY DOCKET NUMBER:	AUS920140234US2
NAME OF SUBMITTER:	MARCIA L. DOUBET
SIGNATURE:	/Marcia L. Doubet/
DATE SIGNED:	09/13/2014
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 14

PATENT REEL: 033735 FRAME: 0410

502974886

source=AUS920140234US2_AssignmentDeclaration_09-13-14#page1.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page2.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page3.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page4.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page5.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page6.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page7.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page8.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page9.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page10.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page11.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page12.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page13.tif
source=AUS920140234US2_AssignmentDeclaration_09-13-14#page14.tif

PATENT REEL: 033735 FRAME: 0411

RECORDATION FO	
PATENT	
To the Director of the U.S. Patent and Trademark Office: Please	e record the attached documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies) Name: International Business Machines Corporation
see attached	
see attached	Internal Address:
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s):	Street Address: New Orchard Road
3. Nature of conveyance/Execution Date(s): Execution Date(s) see attached	
Assignment Merger	ou Armonk
Security Agreement Change of Name	City: Armonk
Joint Research Agreement	State: NY
Government Interest Assignment	Country: US Zip: 10504
Executive Order 9424, Confirmatory License	
Other	Additional name(s) & address(es) attached? Yes No
	document serves as an Oath/Declaration (37 CFR 1.63).
A. Patent Application No.(s)	B. Patent No.(s)
14/485,667	
,== -	1
Additional numbers at	
5. Name and address to whom correspondence	6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L.	6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L.	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: Street Address: P. O. Box 422859	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: Street Address: P. O. Box 422859 City: Kissimmee	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586 Docket Number: AUS920140234US2	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586 Docket Number: AUS920140234US2 Email Address: mld@mindspring.com 9. Signature: /Marcia L. Doubet/	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number Authorized User Name September 13, 2014
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: P. O. Box 422859 Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586 Docket Number: AUS920140234US2 Email Address: mld@mindspring.com 9. Signature: /Marcia L. Doubet/ Signature	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number Authorized User Name September 13, 2014 Date
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: P. O. Box 422859 Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586 Docket Number: AUS920140234US2 Email Address: mld@mindspring.com 9. Signature: /Marcia L. Doubet/ Signature Marcia L. Doubet	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number Authorized User Name September 13, 2014
5. Name and address to whom correspondence concerning document should be mailed: Name: Law Office of Marcia L. Doubet, P. L. Internal Address: P. O. Box 422859 Street Address: P. O. Box 422859 City: Kissimmee State: FL Zip: 34742-2859 Phone Number: 407-343-7586 Docket Number: AUS920140234US2 Email Address: mld@mindspring.com 9. Signature: /Marcia L. Doubet/ Signature Marcia L. Doubet Name of Person Signing Documents to be recorded (including cover sheet	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 0 Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information Deposit Account Number Authorized User Name September 13, 2014 Date Total number of pages including cover

Docket AUS920140234US2

Form PTO-1595 Continuation

Recordation Form Cover Sheet

Conveying Parties	Execution Date
(1) Michael Poplavski	August 26, 2014
(2) Scott Schumacher	August 26, 2014
(3) Prachi Snehal	August 27, 2014
(4) Sean J. Welleck	August 26, 2014
(5) Alan Xia	August 26, 2014
(6) Yinle Zhou	August 27, 2014

PATENT REEL: 033735 FRAME: 0413

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: Generating Weights for Biometric Tokens in Probabilistic Matching
Systems

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
filed on
The above-identified application was made or authorized to be made by me.
believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
have reviewed and understand the contents of the application, including the claims.
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

Page 1 of 3

representatives, or assigns.

(1) Legal Name of Inventor: Michael Poplavski

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.

Signature: MWM PMM	Date: 8/26/1
(2) Legal Name of Inventor: Scott Schumacher	
Signature:	Date:
(3) Legal Name of Inventor: Prachi Snehal	
Signature:	Date:
(4) Legal Name of Inventor: Sean J. Welleck	
Signature: Julian	Date: 8/26/14

(5) Legal Name of Inventor: Alan Xia	
Signature: Mut to	Date: <u>8/26/</u> /4
(6) Legal Name of Inventor: Yinle Zhou	
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: Generating Weights for Biometric Tokens in Probabilistic Matching Systems

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: Michael Poplavski	
Signature:	Date:
(2) Legal Name of Inventor: Scott Schumacher	
Signature: Swith Soll	Date: 8/26/14
(3) Legal Name of Inventor: Prachi Snehal	
Signature:	Date:
(4) Legal Name of Inventor: Scan J. Welleck	
Signature:	Date:

	IBM DOCKET NUMBER: AUS 20140234US1
(5) Legal Name of Inventor: Alan Xia	i
Signature:	Date:
(6) Legal Name of Inventor: Yinle Zhou	
Signature	Date

Page 3 of 3

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: Generating Weights for Biometric Tokens in Probabilistic Matching
Systems

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		

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

known to me to be material to patentability as defined in 37 CFR Section 1.56.

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 frivention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal

Page 1 of 3

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.

Thereby 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: Michael Poplavski	
Signature:	Date:
(2) Legal Name of Inventor: Scott Schumacher	
Signature:	Date:
(3) Legal Name of Inventor: Prachi Snehal	
Signature: Phue	Date: 27th Aug 2014
(4) Legal Name of Inventor: Sean J. Welleck	
Signature:	Date:

(5) Legal Name of Inventor: Alan Xia	
Signature:	Date:
(6) Legal Name of Inventor: Yinle Zhou	
Signature:	Date:

Page 3 of 3

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: Generating Weights for Biometric Tokens in Probabilistic Matching
Systems

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 it		

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

Page 1 of 3

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: Michael Poplavski	
Signature:	Date:
(2) Legal Name of Inventor: Scott Schumacher	
Signature:	Date:
(3) Legal Name of Inventor: Prachi Snehal	
Signature:	Date:
(4) Legal Name of Inventor: Sean J. Welleck	
Signature:	Date:

Page 2 of 3

(5) Legal Name of Inventor: Alan Xia	
Signature:	Date:
(6) Legal Name of Inventor: Yinle Zhou	
Signature: Ale Aou	Date: 8/27/2014

Page 3 of 3

PATENT REEL: 033735 FRAME: 0425