503382159 07/07/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3428781

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT B. BASHAM	07/02/2015
JOSEPH W. DAIN	07/01/2015
EVANGELOS S. ELEFTHERIOU	06/30/2015
DEAN HILDEBRAND	06/29/2015
STAN LI	06/29/2015
EDWARD H.W. LIN	07/06/2015
HAROLD J. ROBERSON II	06/29/2015
SLAVISA SARAFIJANOVIC	07/01/2015
THOMAS D. WEIGOLD	06/30/2015

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:	14793706

CORRESPONDENCE DATA

Fax Number: (408)971-4660

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: 408-971-2573

Email: Wyndie@zilkakotab.com

ZILKA-KOTAB, PC Correspondent Name: Address Line 1: 1155 N. 1ST. STREET

Address Line 2: **SUITE 105**

Address Line 4: SAN JOSE, CALIFORNIA 95112

ATTORNEY DOCKET NUMBER: IBM1P421/SJO920150034US1 NAME OF SUBMITTER: DOMINIC M. KOTAB

PAIENI **REEL: 036075 FRAME: 0171** 503382159

SIGNATURE:	/Dominic M. Kotab/
DATE SIGNED:	07/07/2015
	This document serves as an Oath/Declaration (37 CFR 1.63)
Total Attachments: 24	·
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PATENT REEL: 036075 FRAME: 0172

Title of Invention: <u>EFFICIENTLY MANAGING MOVEMENT OF LARGE AMOUNTS OBJECT DATA IN A STORAGE HIERARCHY</u>

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 numberfiled on
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: Robert B. Basham	
	Signature: Rud B Besh	Date:
(2)	Legal Name of Inventor: Joseph W. Dain	
	Signature:	Date:
(3)	Legal Name of Inventor: Evangelos S. Eleftheriou	
	Signature:	Date:
(4)	Legal Name of Inventor: Dean Hildebrand	
	Signature:	Date:

(5)	Legal Name of Inventor: Stan Li	
	Signature:	_Date:
(6)	Legal Name of Inventor: Edward H.W. Lin	
	Signature:	_ Date:
(7)	Legal Name of Inventor: Harold J. Roberson II	
	Signature:	_ Date:
(8)	Legal Name of Inventor: Slavisa Sarafijanovic	
	Signature:	_Date:
(9)	Legal Name of Inventor: Thomas D. Weigold	
	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

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(1) Legal Name of Inventor: Robert B. Basham

IBM DOCKET NUMBER: IBM1P421/SJO920150034US1

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Signature:	Date:
(2) Legal Name of Inventor-Joseph-WDain	
Signature:	Date: 7/1/15
(3) Legal Name of Inventor: Evangelos S. Eleftheriou	
Signature:	Date:
(4) Legal Name of Inventor: Dean Hildebrand	
Signature:	Date:

Signature:		Date:	
6) Legal Name of Inventor: 1	Edward H.W. Lin		
Signature:		Date:	
7) Legal Name of Inventor: I	Harold J. Roberson II		
Signature:		Date:	
B)—Legal-Name of Inventor: 5	Slavisa Sarafijanovic		
Signature:		Date:	
Legal Name of Inventor: 1	Thomas D. Weigold		

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Signature	•	Date:
(2) Legal Na	me of Inventor: Joseph W. Dain	
Signature	·	Date:
(3) Legal Na	ame of Inventor: Evangelos S. Eleftheriou	Date: June 89 2015
(4) Legal Na	ame of Inventor: Dean Hildebrand	
Signature	·	Date:

(5) Legal Name of Inventor: Stan Li	
Signature:	Date:
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Signature:	Date:
(8) Legal Name of Inventor: Slavisa Sarafijanovic	
Signature: <u>Vari JeS</u>	Date: July 1, 2015
(9) Legal Name of Inventor: Thomas D. Weigold	
Signature	Date:

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(I) Legal Name of Inventor, Robert B. Bas	ksm		
Signature:		288	
(2) Legal Name of Inventor: Joseph W. Da	ŝ		
Signature:		Desc.	
(3) Legal Name of Inventor: Evangelos & I	Eleftherion		
Signature:		Date:	
(4) Legal Name of Inventop Dean Hildeby	xsđ		
Signature 4			<u>z 4/2015</u>

(5)	Legal Name of Inventor: Stan Li	
	Signature:	Date:
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	Signature	Daise;

Page 3 of 3

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	C'a mada ma	Data

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	Signatura	Data

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Signature:	Date:
(6) Legal Name of Inventor: Edward H.W. Lin	
Signature:	Date: 7/6/2018
J. Statement	
(7) Legal Name of Inventor: Harold J. Roberson II	
	•
Signature:	Date:
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(8) Legal Name of Inventor: Slavisa Sarafijanovic	
Signature:	Date:
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Title of Invention: <u>EFFICIENTLY MANAGING MOVEMENT OF LARGE AMOUNTS OBJECT</u>

DATA IN A STORAGE HIERARCHY

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 therein referen

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;

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;

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.

JUN-29-2015 14:59 From:5072531571 Page:2/3

IBM DOCKET NUMBER: IBM1P421/SJO920150034US1

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.

(1) Legal Name of Inventor: Robert B. Basham

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Signature		Date:	
(2) Legal Na	me of Inventor: Joseph W. Dain		
Signature	F	Date:	
(3) Legal Na	me of Inventor: Evangelos S. Eleftheriou		
Signature	<u>.</u>	Date:	
(4) Legal Na	me of Inventor: Dean Hildebrand		
Signature		Date	

(5) Legal Nan	Legal Name of Inventor: Stan Li		
Signature:		Date:	
(6) Legal Nan	ne of Inventor: Edward H.W. Lin		
Signature:		Date:	
	le of Inventor; Harold J. Roberson II Hawley Roferson A	Date: 00-29-2015	
(8) Legal Nam	e of Inventor: Slavisa Sarafijanovic		
Signature:_		Date:	
(9) Legal Nam	e of Inventor: Thomas D. Weigold		
Signature:		Date:	

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(1) Legal Name of Inventor; Robert B. Basham			
	Signature:	Date:	
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	Signature:	Date:	
(3)	Legal Name of Inventor: Evangelos S. Eleftheriou		
	Signature:	Date:	
(4)	Legal Name of Inventor: Dean Hildebrand		
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Page 2 of 3

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(8)	Legal Name of Inventor: Slavisa Sarafijanovic	
	Signature:	Date:
(9)	Legal Name of Inventor: Thomas D. Weigold	
	Signature: They and	Date: <u>30. June</u> 2015

Page 3 of 3