12/02/2015 503593704

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3640334

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the DOCKET NUMBER: TUC920100138US1 (18.375C2) previously recorded on Reel 037137 Frame 0323. Assignor(s) hereby confirms the DOCKET NUMBER: TUC920100138US3 (18.375C2).

CONVEYING PARTY DATA

Name	Execution Date
JOSHUA J. CRAWFORD	11/18/2015
BENJAMIN J. DONIE	11/18/2015
ANDREAS B. KOSTER	11/19/2015
LEANN A. VATERLAUS	11/20/2015

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:	14951053	

CORRESPONDENCE DATA

Fax Number: (310)556-7984

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: 3105567983

Email: pmdrop@ipmatters.com

KONRAD RAYNES DAVDA & VICTOR LLP **Correspondent Name:**

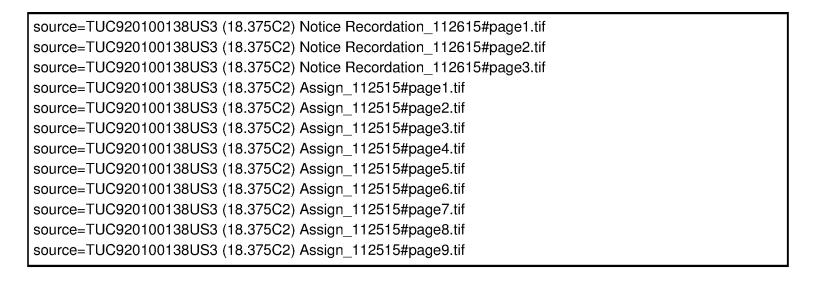
350 S. BEVERLY DRIVE, SUITE 360 Address Line 1: Address Line 4: **BEVERLY HILLS, CALIFORNIA 90212**

ATTORNEY DOCKET NUMBER:	TUC920100138US3 (18.375C2
NAME OF SUBMITTER:	PATRICIA MCLAUGHLIN
SIGNATURE:	/Patricia McLaughlin/
DATE SIGNED:	12/02/2015

Total Attachments: 12

PATENT REEL: 037196 FRAME: 0979

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503585055 11/25/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

c Version v1.1 EPAS ID: PAT3631684

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOSHUA J. CRAWFORD	11/18/2015
BENJAMIN J. DONIE	11/18/2015
ANDREAS B. KOSTER	11/19/2015
LEANN A. VATERLAUS	11/20/2015

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Street Address:	NEW ORCHARD ROAD	
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PROPERTY NUMBERS Total: 1

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Phone: 3105567983

Email: pmdrop@ipmatters.com

Correspondent Name: KONRAD RAYNES DAVDA & VICTOR LLP

Address Line 1:350 S. BEVERLY DRIVE, SUITE 360Address Line 4:BEVERLY HILLS, CALIFORNIA 90212

ATTORNEY DOCKET NUMBER:	TUC920100138US1 (18.375C2	
NAME OF SUBMITTER: PATRICIA MCLAUGHLIN		
SIGNATURE:	/Patricia McLaughlin/	
DATE SIGNED:	11/25/2015	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 9

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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: SUBSTITUTION OF A TARGET VOLUME OF A SECONDARY STORAGE CONTROLLER FOR A SOURCE VOLUME OF A PRIMARY STORAGE CONTROLLER FOR EXECUTING A WRITE OPERATION

This declaration is directed to the attached application, or (if following	box is checked):	
United States application or PCT international application number	14/951,053	
filed on <u>2015-11-24</u> .		

The above-identified application was made or authorized to be made by me.

As a below named inventor, I hereby declare that:

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, the undersigned inventor(s) has/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 each undersigned inventor desires to grant to IBM, the 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, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the 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, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent,

Page 1 of 3- Dec & Assign

and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the 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 the undersigned had this Assignment not been made; and each undersigned inventor agrees 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.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants 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:	DATE:	11-18-15
(2) Legal Name of Inventor: Benja	min J. DONIE	
SIGNATURE:	DATE:	
(3) Legal Name of Inventor: Andre	eas B. KOSTER	
SIGNATURE:	DATE:	

(1) Legal Name of Inventor: Joshua J. CRAWFORD

Page 2 of 3- Dec & Assign

(4) Legal Name of Inventor: Leann A. VATERLAUS

SIGNATURE:

DATE:

Page 3 of 3- Dec & Assign

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: SUBSTITUTION OF A TARGET VOLUME OF A SECONDARY STORAGE CONTROLLER FOR CONTROLLER FOR EXECUTING A WRITE OPERATION

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

X1 United States application or PCT international application number 14/951,053
filed on 2015-11-24

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.

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Whereas, the undersigned inventor(s) has 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 Docker Number provided above in the header of this document.

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Now therefore for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the 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, each undersigned inventor hereby authorizes and applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent requests the Director of the United States Patent and Trademark Office to issue any United States Patent.

Page 1 of 3- Dec & Assign

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and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM its successors legal representatives, and assigns, the entire worldwide right, title, and interest in any 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 emoyed by the undersigned had this Assignment not been made, and each undersigned inventor agrees 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, and assigns, whenever requested by IBM, its successors, legal representatives.

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SIGNATURE DATE

(2) Legal Name of Inventor: Benjamin J. DONIE

SIGNATURE 23-5

(3) Legal Name of Inventor: Andreas B. KOSTER

SKINATURE DATE

IBM DOCKET NUMBER (TUC9201001)81383 FIRM NUMBER (0018033502)

(4) Legal Name of Inventor: Leann A. VATERLAUS

SIGNATURE

DATE

PATENT
PAGE TO U. Dec & Assets
REEL: 037196 FRAME: 0987

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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I have reviewed and understand the contents of the application, including the claims.

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Page 1 of 3- Dec & Assign

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(1) Legal Name of Inventor; Joshua J. CRAWFORD

SIGNATURE:

DATE:

(2) Legal Name of Inventor: Benjamin J. DONIE

SIGNATURE:

DATE:

(3) Legal Name of Inventor: Andreas B. KOSTER

SIGNATURE:

DATE:

Page 2 of 3- Dec & Assign

19NOU 2015

30 Legal Name of Taxonor: Leans 4. 5.4 (EVE.415)

SECTION .

DATE

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RECORDED: 12/02/2015