504738381 01/19/2018 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4785107

		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY DA	ATA				
		Name	Execution Date		
MATTHEW J. WARD			12/14/2017		
MATTHEW J. KALOS			12/14/2017		
JOSHUA J. CRAWFORD	12/14/2017				
CARLOS S. MELLGREN			01/09/2018		
RECEIVING PARTY DA	ТА				
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City:	ARMONK				
State/Country:	NEW YORK				
Postal Code:	10504				
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Property Type		Number	7		
Application Number:		15868875			
CORRESPONDENCE D		(310)556-7984			
		the e-mail address first; if that is u	nsuccessful it will be sent		
using a fax number, if p					
Phone: 31055		; if that is unsuccessful, it will be se			
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Email: Correspondent Name:	:	3105567983 kmdrop@ipmatters.com KONRAD, RAYNES, DAVDA AND VIC	ent via US Mail. CTOR LLP		
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Email: Correspondent Name: Address Line 1: Address Line 4:		3105567983 kmdrop@ipmatters.com KONRAD, RAYNES, DAVDA AND VIC 350 SOUTH BEVERLY DRIVE SUITE BEVERLY HILLS, CALIFORNIA 90212	ent via US Mail. CTOR LLP 360		
Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER:		3105567983 kmdrop@ipmatters.com KONRAD, RAYNES, DAVDA AND VIC 350 SOUTH BEVERLY DRIVE SUITE BEVERLY HILLS, CALIFORNIA 90212 P201702586US01 18.769	ent via US Mail. CTOR LLP 360		
Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: SIGNATURE:		3105567983 kmdrop@ipmatters.com KONRAD, RAYNES, DAVDA AND VIC 350 SOUTH BEVERLY DRIVE SUITE BEVERLY HILLS, CALIFORNIA 90212 P201702586US01 18.769 KARLIN MEEHAN	ent via US Mail. CTOR LLP 360		
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Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER: BIGNATURE:		3105567983 kmdrop@ipmatters.com KONRAD, RAYNES, DAVDA AND VIC 350 SOUTH BEVERLY DRIVE SUITE BEVERLY HILLS, CALIFORNIA 90212 P201702586US01 18.769 KARLIN MEEHAN /Karlin Meehan/ 01/19/2018	ent via US Mail. CTOR LLP 360 2		

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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: SIDEFILES FOR MANAGEMENT OF DATA WRITTEN VIA A BUS INTERFACE TO A STORAGE CONTROLLER DURING CONSISTENT COPYING OF DATA

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 <u>15/868,875</u> filed on <u>01/11/2018</u>.

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 C.F.R. § 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.

Page 1 of 2- Dec & Assign

PATENT REEL: 044679 FRAME: 0730

IBM DOCKET NUMBER: P201702586US01 FIRM NUMBER: 0018.0769

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: Matthew J. WARD	
SIGNATURE: Watthe Ular)	DATE: 12 14/2017
(2) Legal Name of Inventor: Matthew J. KALOS	
SIGNATURE	DATE: 12/14/2017
(3) Legal Name of Inventor: Joshua J. CRAWFORD	
SIGNATURE	DATE: 12/14/17
(4) Legal Name of Inventor: Carol S. MELLGREN	
SIGNATURE:	DATE

Page 2 of 2- Dec & Assign

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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.

Page 1 of 2- Dec & Assign

PATENT REEL: 044679 FRAME: 0732 I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and an unaware of any reason why I may not have the full and unencombered 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.

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(1) Legal Name of Inventor: Matthew J. WARD

SIGNATURE	DATE:
(2) Legal Name of Inventor: Matthew J. KALOS	
SIGNATURE	DATE:
(3) Legal Name of Inventor: Joshus J. CRAWFORD	
SIGNATURE	DATE:
(4) Legal Name of Inventor: Carol S. MELLGREN	
SIGNATURE: CLAA. And James	DATE: 1-9-2018

Page 2 of 2- Dec & Assign

RECORDED: 01/19/2018