503586504 11/25/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3633133

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARK V. CHITTI	11/20/2015
DOUGLAS M. FREIMUTH	11/20/2015
JOHN F. HOLLINGSWORTH	11/20/2015
BAIJU D. MANDALIA	11/18/2015

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:	14952463

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.

Phone: 518-452-5600 tas@hrfmlaw.com

Correspondent Name: HESLIN ROTHENBERG FARLEY & MESITI P.C.

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Address Line 4: ALBANY, NEW YORK 12203

ATTORNEY DOCKET NUMBER:	END920150266US1	
NAME OF SUBMITTER:	MATTHEW M. HULIHAN	
SIGNATURE:	/Matthew M. Hulihan/	
DATE SIGNED:	11/25/2015	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 8 source=H0449656#page1.tif

PATENT 503586504 REEL: 037143 FRAME: 0513



PATENT REEL: 037143 FRAME: 0514

DECLARATION (37 C.E.R. 1.63) FOR DITILITY PATENT APPLICATION UNING AN APPLICATION DATA SHEET (37 C.E.R. 1.76) AND ANALANDENT

Tale of lavention: DYNAMIC QUALITY OF SERVICE FOR STORAGE FO PORT ALLOCATION

As a below named inventor, I hereby declare that:	
This declaration is directed to the attached application, or (if following box is closeled):	
[] United States application or PCT international application number filed on	
The above identified application was made or authorized to be made by nis.	
I believe that I am the original inventor or an original joint inventor of a claused inventoral in the application.	
I have reviewed and understand the contents of the application, including the classes.	
I am aware of the duty to disclose to the United States Patent and Tradamark Office all informations 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 discoveres (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 understand inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the branchost and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sofficiency thereof being benefity acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assistant has assigned, and otherwise transfers or has transferred to iBM (the "ANMORD IL"), the successors is got representatives, and assigns, the entire worldwide right, title, and interest in and in the line to an inciabove 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 bassian countries and jurisdictions, including all divisions, continuations, recessors, terrationalisms, exists also extensions, counterparts, substitutes, and extensions thereof, and all rights of privary residing from the filing of such applications and granting of such parents. In addition, each undersigned inventor facility authorizes and requests the Director of the United States Potent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted by the historium, to Hild. its successors, legal representatives, and assigns, the entire worldwide right, title, and natural in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full and 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 distance of inscribing agrees to execute any and all documents and instruments and perform all lawful as to reasonably related to recording this Assignment or perfecting title to the Invention and all related parada and applications are IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors began representatives, or assigns.

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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 US(C,1001) by fine or imprisonment of not more than five (5) years, or both.

(1) Legal Name of Inventor: Mark V. CHITTI	
Signature: 14/1/2 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4	Date: 11-20-15
(2) Legal Name of Inventor: Douglas M. FREIMUTH	
Signature:	Date:
(3) Legal Name of Inventor: John F. HOLLINGSWORTH	
Signature:	Date:
(4) Legal Name of Inventor: Baiju D. MANDALIA	
Signature:	Outc:

IBM DOCKET NUMBER: END920150266US1

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: DYNAMIC QUALITY OF SERVICE FOR STORAGE I/O PORT ALLOCATION

As a below named inventor, I hereby declare that:
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[] United States application or PCT international application number
The above-identified application was made or authorized to be made by me.
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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 requests 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, 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.

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IBM DOCKET NUMBER: END920150266US1

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.

(1) Legal Name of inventor; Mark v. CHIIII	
Signature:	Date:
(2) Legal Name of Inventor: Douglas M. FREIMUTH	
Signature: Dungfus Lumi	Date: 11/20/2015
(3) Legal Name of Inventor: John F. HOLLINGSWORTH	
Signature:	Date;
(4) Legal Name of Inventor: Baiju D. MANDALIA	
Signature:	Date:

(H0389577.1) Page 2 of 2

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ALLOCATION

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NESSER STR.	
 Legal Name of Inventor: Dougles M. FREIMUTH 	
	Date:
) Legal Name of Inventor: John F. HOLLINGSWORT	XX
51gmature	
) Legal Name of Inventor: Baija D. MANDALIA	

parametric Page 2 of 2

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Signature:	Date:
(2) Legal Name of Inventor: Douglas M. FREIMUT	н
Signature:	Date:
(3) Legal Name of Inventor: John F. HOLLINGSW	ORTH
Signature:	Date:
(4) Legal Name of Inventor: Baiju D. MANDALIA	
Signature: By DMan	Date:

{H0389577.1} Page 2 of 2

PATENT REEL: 037143 FRAME: 0522

RECORDED: 11/25/2015