505782965 11/20/2019

### PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: CORRECTIVE ASSIGNMENT

NATURE OF CONVEYANCE: Corrective Assignment to correct the TITLE. SHOULD BE, INCREASING

Corrective Assignment to correct the TITLE, SHOULD BE, INCREASING DATABASE PERFORMANCE THROUGH QUERY AGGREGATION previously recorded on Reel 051001 Frame 0266. Assignor(s) hereby confirms the TITLE IS INCREASING DATABASE PERFORMANCE THROUGH QUERY AGGREGATION.

EPAS ID: PAT5829792

#### **CONVEYING PARTY DATA**

Name	Execution Date
KAREN CHENG	02/12/2017
MARSHALL TODD JARMAN	02/13/2017
CHARLES MATULA	02/13/2017

#### **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:	16682990

#### **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

**Email:** karen.scipio@hrfmlaw.com

Correspondent Name: HESLIN ROTHENBERG FARLEY & MESITI PC

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Address Line 4: ALBANY, NEW YORK 12203

ATTORNEY DOCKET NUMBER: END920170011US02	
NAME OF SUBMITTER: RACHEL L. PEARLMAN	
SIGNATURE:	/Rachel L. Pearlman/
DATE SIGNED:	11/20/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

PATENT 505782965 REEL: 051062 FRAME: 0454

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NOVEMBER 14, 2019

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HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE ALBANY, NY 12203

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RECORDATION DATE: 11/13/2019 REEL/FRAME: 051001/0266

NUMBER OF PAGES: 8

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: END920170011US02

ASSIGNOR:

CHENG, KAREN DOC DATE: 02/12/2017

ASSIGNOR:

JARMAN, MARSHALL TODD DOC DATE: 02/13/2017

ASSIGNOR:

MATULA, CHARLES DOC DATE: 02/13/2017

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES

CORPORATION NEW ORCHARD ROAD

ARMONK, NEW YORK 10504

APPLICATION NUMBER: 16682990 FILING DATE: PATENT NUMBER: ISSUE DATE:

TITLE: MAINTAINING CORE DUMP PRIVACY DURING APPLICATION FAULT HANDLING

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#### PATENT ASSIGNMENT COVER SHEET

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 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KAREN CHENG	02/12/2017
MARSHALL TODD JARMAN	02/13/2017
CHARLES MATULA	02/13/2017

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City:	ARMONK
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Postal Code:	10504

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16682990

#### **CORRESPONDENCE DATA**

PATENT REEL: 051062 FRAME: 0458/2019, 6:38 PM **Fax Number:** (518)452-5579 **Phone:** 518-452-5600

Email: karen.scipio@hrfmlaw.com

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.

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

Address Line 1: 5 COLUMBIA CIRCLE
Address Line 4: ALBANY, NEW YORK 12203

ATTORNEY DOCKET
NUMBER:

NAME OF SUBMITTER:

RACHEL L. PEARLMAN

Signature: /Rachel L. Pearlman/

**Date:** 11/13/2019

This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 6** 

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PATENT

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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: INCREASING DATABASE PERFORMANCE THROUGH QUERY AGGREGATION

As a below named 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, 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, 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.

Page 1 of 2

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: Karen CHENG	
	Signature:	Date: FEB 12,201
(2)	Legal Name of Inventor: Marshall Todd JARMAN	
	Signature:	Date:
(3)	Legal Name of Inventor: Charles MATULA	
	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: INCREASING DATABASE PERFORMANCE THROUGH QUERY AGGREGATION

As a below named 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, 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, 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.

Page 1 of 2

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: Karen CHENG	
Signature:	Date:
(2) Legal Name of Inventor: Marshall Todd JARMAN	
Signature: Mcwhall Lold Janon	02/13/2017 Date:
(3) Legal Name of Inventor: Charles MATULA	
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: INCREASING DATABASE PERFORMANCE THROUGH QUERY AGGREGATION

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This declaration is directed to the attached application, or (if following box is checked):
[ ] United States application or PCT international application number
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I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
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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:
(2) Legal Name of Inventor: Marshall Todd JARMAN	
Signature:	Date:
(3) Legal Name of Inventor: Charles MATULA	
4	Date: 18h 13, 2017

PATENT REEL: 051062 FRAME: 0465

**RECORDED: 11/20/2019**