505801175 12/03/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| RAFAL KONIK | 11/25/2019 |
| JINGDONG SUN | 11/25/2019 |
| ROGER MITTELSTADT | 11/25/2019 |
| JESSICA R. EIDEM | 11/25/2019 |

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: | 16702235 | | | |

CORRESPONDENCE DATA

Fax Number: (281)886-7716

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: 2818867107

Email: uspto@garglaw.com
Correspondent Name: IBM AUS IPLAW (GLF)

Address Line 1: C/O GARG LAW FIRM, PLLC

Address Line 2: 10701 CORPORATE DR., SUITE 230

Address Line 4: STAFFORD, TEXAS 77477

| ATTORNEY DOCKET NUMBER: | P201901281US01 |
|-------------------------|--|
| NAME OF SUBMITTER: | SABRINA ERNST |
| SIGNATURE: | /Sabrina Ernst/ |
| DATE SIGNED: | 12/03/2019 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 4

PATENT REEL: 051166 FRAME: 0269

EPAS ID: PAT5848004

source=P201901281US01_Assignment_Declaration#page1.tif source=P201901281US01_Assignment_Declaration#page2.tif source=P201901281US01_Assignment_Declaration#page3.tif source=P201901281US01_Assignment_Declaration#page4.tif

IBM DOCKET NUMBER: P201901281US01

DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

STREAMING TUPLE DATABASE CONTROL

| 2100 | |
|--|--|
| 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 | filed on |
| The above-identified application was made or authorized to be made by me. The above-identified application was made or authorized to be made by me. The above-identified application was made or an original joint inventor of a claimed invention in the apt I believe that I am the original inventor or an original joint inventor of a claimed invention in the apt I have reviewed and understand the contents of the application, including the claims. I have reviewed and understand the contents of the application, including the claims. I have reviewed and understand the contents of the above-intentified patent application and further ident referred to as the "Invention") disclosed in the above-identified patent application and further ident referred to as the "Invention") disclosed in the above-identified patent application and further ident referred to as the "Invention") disclosed in the above-identified patent application and further ident referred to as the "Invention" and made and the header of this document: Docket Number provided above in the header of this document: Docket Number provided above in the header of this document: Whereas, International Business Machines Corporation, a corporation of New York having a place Whereas, International Business Machines Corporation, a corporation of New York having a place Whereas, International Advantage of the original application and patents directed thereto; Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hers acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has otherwise transfers or has transferred to IBM (the "ASSIGNOR") hereby sells or has sold, assigns or has otherwise transfers or has transferred to IBM (the "ASSIGNOR") hereby sells or has sold, assigns or has otherwise transfers or has transferred to IBM (the "ASSIGNOR") hereby sells or has sold, assigns or has otherwise transfers or has transferred to IBM (the "ASSIGNOR") hereby sells or has sold, assigns or has otherwi | eries (herein ified by the IBM of business at or desires to grant all patent dby assigned, and ves, and assigns, tates patent applied for or visions, sons thereof, and addition, each Trademark Office d for the le, and interest in to the full end of seen held sud grass to execute this Assignment segal assigns and will not year in will not year in grant in and year in and |
| will be resolved in a New York state court or tederal court sited in New York. I hereby acknowledge that any will full false statement made in this declaration to punished be under the or improvement of not more than five (5) years or both. | **************** |

Page 1 of 4

(1) Legal Name of Inventor RAFAL KONIK

DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

STREAMING TUPLE DATABASE CONTROL

| 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 | filed 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 applic | ation. |
| 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 | wn 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 | |
| Docket Number provided above in the header of this document; | • • • • • • • • • |
| Whereas, International Business Machines Corporation, a corporation of New York having a place of b | usiness at |
| Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned inventor de | |
| to IBM, the entire worldwide right, fitle, and interest in and to the Invention and in and to any and all pa | |
| 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 assign | med. and |
| ofherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, | |
| the entire worldwide right, title, and interest in and to the Invention, the above-identified United States | |
| application, and any and all other patent applications and patents for the Invention which may be applie | |
| granted therefor in the United States and in all foreign countries and jurisdictions, including all division | |
| continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions | |
| all rights of priority resulting from the filing of such applications and granting of such patents. In addit | |
| undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trades | |
| to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for | |
| Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, an | |
| and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the | |
| the terms for which any and all such patents may be granted, as fully and entirely as would have been h | |
| enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees | |
| any and all documents and instruments and perform all lawful acts reasonably related to recording this. | |
| or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal | zezikimien |
| representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assign | na. |
| Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfe | |
| | |
| under this Assignment to IBM and is unaware of any reason why they may not have the full and unence to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and v | |
| | |
| execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grant | |
| successors, legal representatives, and assigns, the right to insert in this Assignment any further identific | |
| (including, but not limited to, patent Application Number) which may be necessary or desirable for reco | |
| this Assignment. This Assignment is governed by the substantive laws of the State of New York, and a | ny disputes |
| will be resolved in a New York state court or federal court sited in New York. | CO CY YOU I |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U | .a.c., 1001 |
| by fine or imprisonment of not more than five (5) years, or both. | |
| | |

(2) Legal Name of Inventor: JINGDONG SUN

Page 2 of 4

DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

STREAMING TUPLE DATABASE CONTROL

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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. Each understaned inventor acknowledges their prior and one one 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 itself 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

thereby acknowledge that any willful false statement made in this declaration is punishable under 1811.5 C 1001 by the orangersomeen of not more than the (5) years, or both

(3) Legal Name of Inventor ROGER SHITTELS (ADT)

Sugnature LANGELET

PATENT Page 3 of 4 REEL: 051166 FRAME: 0273

IBM DOCKET NUMBER: P201901281US91

DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

STREAMING TUPLE DATABASE CONTROL

| As a below named inventor, I hereby declare that: This declaration is directed to the attached application, or (if following box is checked application of PCT international application number |):filed 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 inventor of the law 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 a be material to patentability as defined in 37 CFR Section 1.56. Whereas, the undersigned inventor(s) has/have made certain inventions, improvement referred to as the "Invention") disclosed in the above-identified patent application and Docket Number provided above in the header of this document; Whereas, International Business Machines Corporation, a corporation of New York Armonk, New York (herein referred to as "IBM"), desires to acquire, and each under to IBM, the entire worldwide right, title, and interest in and to the Invention and in an applications and patents directed thereto; Now, therefore, for good and valuable consideration, the receipt and sufficiency there acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, a otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legs the entire worldwide right, title, and interest in and to the Invention, the above-identic application, and any and all other patent applications and patents for the Invention will granted therefor in the United States and in all foreign countries and jurisdictions, incontinuations, reissues, reexaminations, renewals, extensions, counterparts, substituted linghts of priority resulting from the filing of such applications and granting of such undersigned inventor hereby authorizes and requests the Director of the United States to issue any United States Patent, and foreign patent authorities to issue any foreign invention, to IBM, its successors, legal representatives, and assigns, the entire world and to the same to be held and enjoyed by IBM, its successors, legal representatives, the terms for which any and all such patents may be granted, | s, and discoveries (herein further identified by the IBM aving a place of business at igned inventor desires to grant d to any and all patent. of being hereby signs or has assigned, and I representatives, and assigns, and I mitted States patent inch may be applied for or lading all divisions, and extensions thereof, and a patents. In addition, each Patent and I rademark Office atent, granted for the vide right, title, and interest in and assigns to the full end of yould have been held and |
| any and all documents and instruments and perform all lawful acts reasonably relates | to recording this Assignment |

will be resolved an a New York state count or federal court sited in New York thereby acknowledge that any willful false curement made in this declaration is purishable under 18 U.S.C. 1001 by fine or imprisorment of not more than five (5) years, or both.

Each understaned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the fights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to self, 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 understanted inventor also hereby grades (1994) is successors, legal representatives, and assigns, the right to unsert to this Assignment any further identification functioning that need to make the parent Application Number 2 which may be necessary or desirable for record than of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes

or perfecting title to the invention and all related patents and applications, in IRM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

(4) Legal Name of Inventor JESSICAR, EIDEM

Page 4 of 4