11/18/2014 503066737

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3113340

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------------------|----------------|
| HUI ZANG | 11/07/2014 |
| BALASUBRAMANIAN PRANATHARTHIHARAN | 11/03/2014 |

RECEIVING PARTY DATA

| Name: | GLOBALFOUNDRIES INC. |
|-------------------|---|
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| Internal Address: | P.O. BOX 309 |
| City: | GRAND CAYMAN |
| State/Country: | CAYMAN ISLANDS |
| Postal Code: | KY1-1104 |
| 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: | 14541754 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 3718.164/EU636A |
|-------------------------|--------------------------|
| NAME OF SUBMITTER: | JACQUELYN A. GRAFF, ESQ. |
| SIGNATURE: | /Jacquelyn A. Graff/ |

REEL: 034201 FRAME: 0655 503066737

PATENT

| DATE SIGNED: | 11/18/2014 |
|--|--|
| | This document serves as an Oath/Declaration (37 CFR 1.63). |
| Total Attachments: 3 source=H0009852#page1.tif source=H0009851#page1.tif source=H0009851#page2.tif | |

PATENT REEL: 034201 FRAME: 0656

GF Ref. No.: 3718.164/EU636A

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Investion

INTEGRATED CIRCUITS WITH MIDDLE OF LINE

| , | CAPACITANCE REDUCTION IN SELF-ALIGNED CONTACT PROCESS FLOW AND FABRICATION METHODS |
|--|---|
| | DECLARATION |
| As the below | named inventor, I hereby declare that: |
| This declarati | on The attached application, or |
| is directed to: | United States application or PCT international application numberfiled on |
| | |
| The above-id | entified 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. |
| | owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by onment of not more than five (5) years, or both. |
| | ed and understand the contents of the application and am aware of the duty to disclose to the US Patent and ffice all information known to me to be material to patentability as defined in 37 CFR § 1.56. |
| | ASSIGNMENT |
| hereby sell, a Grand Cayms the invention any foreign o extensions the and Applicate including but proceedings s | and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I ssign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO Box 309, Ugland House, in KY1-1104 its successors and assigns, absolutely and forever, my entire right, title and interest in and to listed above, together with the Application, any and all Patents that may issue in the United States and/or puntries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or creof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents ons, for the United States and all foreign countries, and all the rights and privileges relating thereto not limited to the priority rights arising from said Applications, the right to recover and take all such is may be necessary for the recovery of damages or otherwise in respect of past, present and future and the right to apply for, take and maintain patents on said inventions. |
| | n of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect. |
| | |
| Inventor: | AE OF INVENTOR Hui ZANG Date: |
| Signature: | |
| Note: An appl | ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |

Use an additional form for each additional inventor.

PATENT REEL: 034201 FRAME: 0657

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

INTEGRATED CIRCUITS WITH MIDDLE OF LINE CAPACITANCE REDUCTION IN SELF-ALIGNED CONTACT PROCESS FLOW AND FABRICATION METHODS

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 application. | |
| I have reviewed and understand the contents of the application, including the claims. | |
| am aware of the duty to disclose to the United Course | |

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 easonably 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 accessors, legal representatives, or assigns.

Page I 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: Balasubramanian PRANATHARTHIHARAN

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| Čivnotura. | |) | 11 03 | 140 |
| Dignature. | | 5,40,5 | | 1 |