504442982 07/05/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANDREW M. GREENE	06/26/2017
SIVANANDA K. KANAKASABAPATHY	06/23/2017
GAURI KARVE	06/26/2017
ERIC R. MILLER	06/26/2017
PIETRO MONTANINI	06/23/2017

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:	15639721

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	YOR920161637US1
NAME OF SUBMITTER: FRANK V. DEROSA	
SIGNATURE:	/frank v. derosa/
DATE SIGNED: 07/05/2017	
This document serves as an Oath/Declaration (37 CFR 1.63).	

PATENT REEL: 042902 FRAME: 0823

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PATENT REEL: 042902 FRAME: 0824

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:

UTILIZING MULTILAYER GATE SPACER TO REDUCE EROSION OF SEMICONDUCTOR FIN DURING SPACER PATTERNING

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 filed on ______.

The above-identified application was made or authorized to be made by me.

application.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the

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 sett 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.

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Lacknowledge my prior and ongoing obligations to self, 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 self, 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 bereby 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 bereby 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: Andrew M. Gree	ne
Signature:	2
(2) Legal Name of Inventor: Hong He	
Signature:	Date:
(3) Legal Name of Inventor: Sivananda K. Ka	nakasabapathy
Signature:	Date:
(4) Legal Name of Inventor; Gauri Karve	
Signature:	Date:

IBM DOCKET NUMBER: YOR920161637US1

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.

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(1) Legal Name of Inventor: Andrew M. Greene	
Signature:	Date:
(2) Legal Name of Inventor: Hong He	
Signature:	Date:
(3) Legal Name of Inventor: Sivananda K. Kanakasabapa	
Signature:	Date:
(4) Legal Name of Inventor: Gauri Karve	
Signature:	Date:

Lacknowledge my prior and ongoing obligations to self, 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 self, 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; Andrew M. Greene	
Signature:	Date:
(2) Legal Name of Inventor: Hong He	
Signature:	Date:
(3) Legal Name of Inventor; Sivananda K. Kanakasa	bapathy
Signature:	Date:
(4) Legal Name of Inventor: Gauri Karve	
Signature:	Date: 06/26/2019

IBM DOCKET NUMBER: YOR920161637US1

(5)	Legal Name of Inventor: Eric R. Miller	
	Signature: La Male	Date: 6/26/17
(6)	Legal Name of Inventor: Pietro Montanini	
	Signature:	Date:

IBM DOCKET NUMBER: YOR920161637US1

Date:
Date: 06/23/2017

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PATENT REEL: 042902 FRAME: 0830

RECORDED: 07/05/2017