#### 505761074 11/06/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5807890

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
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BENJAMIN MADON	11/05/2019
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### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16676278

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ATTORNEY DOCKET NUMBER:	P201901640US01	
NAME OF SUBMITTER:	RAMRAJ SOUNDARARAJAN	
SIGNATURE:	/Ramraj Soundararajan/	
<b>DATE SIGNED:</b> 11/06/2019		
	This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 2** 

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**PATENT** REEL: 050945 FRAME: 0384 505761074

# 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: Method of Growing Titanium Nitride on Silicon Substrate Free from Silicon
Nitride Interface by Using a Titanium Seed Layer

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 numberfiled 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.
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:

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### IBM DOCKET NUMBER: P201901640US01

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.

(It I som! Name of Inventor AAVACH DIICHD

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Signature: Auch	Date:N6-V 5, 2019
(2) Legal Name of Inventor: BENJAMIN MADON	
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