504002900 09/13/2016

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4049556

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
POUYA HASHEMI	01/21/2015
ALI KHAKIFIROOZ	01/22/2015
ALEXANDER REZNICEK	01/28/2015

### **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:	15263836	

### **CORRESPONDENCE DATA**

**Fax Number:** (607)429-4119

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:** 914-766-0567

Email: dlhochdo@us.ibm.com

Correspondent Name: IBM CORPORATION - ENDICOTT DRAFTING CENT

Address Line 1: 294 ROUTE 100
Address Line 2: P.O. BOX 100

Address Line 4: SOMERS, NEW YORK 10589-0100

ATTORNEY DOCKET NUMBER:	YOR920140381US2
NAME OF SUBMITTER:	BRYAN D. WELLS
SIGNATURE:	/Bryan D. Wells/
DATE SIGNED:	09/13/2016
This document serves as an Oath/Declaration (37 CFR 1.63).	

### **Total Attachments: 6**

source=YOR920140381US1\_Executed\_Assignment-Declaration1#page1.tif source=YOR920140381US1\_Executed\_Assignment-Declaration1#page2.tif

PATENT 504002900 REEL: 039718 FRAME: 0950

source=YOR920140381US1\_Executed\_Assignment-Declaration1#page3.tif
source=YOR920140381US1\_Executed\_Assignment-Declaration1#page4.tif
source=YOR920140381US1\_Executed\_Assignment-Declaration1#page5.tif
source=YOR920140381US1\_Executed\_Assignment-Declaration1#page6.tif

PATENT REEL: 039718 FRAME: 0951

# 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: FORMATION OF STRAINED FINS IN A FINFET DEVICE

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 parent 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

Page 1 of 2

representatives, or assigns.

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.

Thereby 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: Pouya Hashemi	
	Signature: PAHALET	Date: 1/21/201
(2)	Legal Name of Inventor: Ali Khakifiroox	,
	Signature:	Date:
(3)	Legal Name of Inventor: Alexander Reznicek	
	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: FORMATION OF STRAINED FINS IN A FINFET DEVICE

No restaurant na esta esta	
As a below named inventor, I hereby declare that:	
This declaration is directed to the anached application, or (if fol	lowing box is cheeked);
f 1 United States application or PCT international application in filed on	sinher
The above-identified application was made or nuthorized to be n	Accidental Control
and the second s	meet (sy me.
Declieve that I am the original inventor or an original joint inventoplication.	ttor of a claimed invention in the
Usave reviewed and understand the contents of the application, i	neluding the claims.
Law aware of the disty to disclose to the United States Patent and known to me to be material to patentiability as defined in 37 CFR	l Trademark Office all information l Section 1.56.
Whereas, the undersigned inventor(s) has/have made certain invention") disclused in the above-tile identified by the IBM Docket Number provided above in the bea	ntified patent application and further

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 thereign

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 prosdictions, including all divisions, continuations, reissnes, reexaminations, renewals. extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and genuting of such parents. In addition, each undersigned inventor bereby 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 lowful acts reasonably related to recording this Assignment or perfecting title to the becoming and all related patents and applications, in HBM, its successors, legal representatives, and assigns, whenever requested by HBM, its successors, legal

representatives, or assigns.

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 fufl 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.

Thereby 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: Pouya Hashemi	
	Signature:	Date:
(2)	Legal Name of Inventor: Ali Khakifirooz	
	Signature: A Chu C	
(3)	Legal Name of Inventor: Alexander Reznicek	
	Simulture:	Duie:

# DECLARATION G7 C.F.R. L63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET G7 C.F.R. L76) AND ASSIGNMENT

### Title of Invention: FORMATION OF STRAINED FINS IN A FINFET DEVICE

As a below named throaten. I hereby decline than:
This declaration is directed to the attached application, or cit following box is checked:
[ ] United State-inpetiention or PC1 integrational application number
The above identified application was made or authorized to be made by me.
I believe that I mustbe original inventor or an original joint inventor of a claimed invention in the application.
I have terrespect and understand the contents of the application, including the claims
Units aware of the duty to declose to the United States Patent and Trademark Office all information known to the to-be material to patentability as defined in 37 CFR Section 1.56.
Whereas, the undersigned inventorix) has/have quide certain inventions, improvements, and discoveries diewin referred to as the "Invention") disclosed in the above-identified patent application and further

Whereas, International Business Machides Corporation, a corporation of New York having a place of modiness at Armonk, New York therein referred to as "IBM"), desires to acquire, and each undersigned misomore desires to gram to IBM, the entire worldwide right, this, and murest in and to the Insention and

identified by the BM Docket Sumber provided above in the header of this document.

in and to any and all patent applications and patents directed therepo:

Now therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ANSIGNOR") hereby selfs in his sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSWANEE"), its successors, legal representatives, and assigns, the entite worldwide right, thie, and interest in and to the Insention, the above deputified United States patent application, and any and all other patent applications and patents for the Invention which that he applied for or armined therefor in the United States and in all foreign countries and mesalictions, nichiding all divisions, combinations, reissnes, reexammations, renewals, extensions, counterpairs, substitutes, and extensions therein, and all rights of priority resulting from the tiling of such applications and granting of such patents. In addition, each understance involves bereby anthorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Parent, and toreign parent authorities to issue any barrien parent, granted for the livention, to IBM. its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be hold and officeed by IRM, its successors, local representatives, and assigns to the full old of the terms for which any und all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned find this Assignment not been under and each undersigned inventor agrees to execute mer and all documents and justicinicins and perform all lowful feets teasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in HBAL its successors, local representatives, and assigns, whenever requested by HBAL its successors, local

Page For 2

#### THAT IN BURGES NO. ASSESSMENT SORROWN DOCUMENTS OF THE STATE OF THE ST

representatives, or asserts

(1) Legal Name of Inventor Ponya Hasheni

Each undersigned inventor action telegos their prior and originity obligations to self, assign and transfer the rights under this Assignment to IRM and is unavane of any reason was they may not have the full and undercombered right to self, assign, and transfer the rights hereby sold, as raised and transferred, and has not executed, and will not execute, any document or instrument in contlict hereby the Tach understand intention also hereby grains IRM, its successors, legal representances, and assigns the right to insert in this Assignment any further identification (including, but not limited to patent Application Number) a fuch may be necessary or desirable for recondation of this Assignment. This Assignment is poverted by the substantics laws of the State of New York, and any disputes will be resolved in a New York state court or tederal court shed in New York.

Thereby acknowledge that am willful take statement needs in this declaration is punishable under 18 (). If S.C. [180] by this or imprisonment of not now than his OS years, or both.

Stending				
in Logal Nass	stiacemas Ali b	drakifirm		
Neudlen				
¹r Legai Nan∞ (	t Insenier Nes	mder Reznieck		
Similaria.	Duran		Date - A	28,700
	anakii Milaka agaga		 	

Page 2 : 4 3

PATENT REEL: 039718 FRAME: 0957