PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

1.1 EPAS ID: PAT4374977

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WEILIN	11/17/2014
LEATHEN SHI	11/14/2014
SPYRIDON SKORDAS	11/13/2014
KEVIN R. WINSTEL	11/17/2014

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:	15491329

CORRESPONDENCE DATA

Fax Number: (860)286-0115

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Email: usptopatentmail@cantorcolburn.com

Correspondent Name: CANTOR COLBURN LLP - IBM FISHKILL

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Address Line 2: 22ND FLOOR

Address Line 4: HARTFORD, CONNECTICUT 06103

ATTORNEY DOCKET NUMBER:	FIS920140192US03
NAME OF SUBMITTER:	MATTEO D. PEDINI
SIGNATURE:	/Matteo D. Pedini/
DATE SIGNED:	04/19/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 8

PATENT REEL: 042063 FRAME: 0496

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PATENT REEL: 042063 FRAME: 0497

Title of Invention: SEMICONDUCTOR DEVICE INCLUDING BUILT-IN CRACK-ARRESTING FILM STRUCTURE

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.
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

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:

known to me to be material to patentability as defined in 37 CFR Section 1.56.

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 sell 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.

Page 1 of 2

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: Wei Lin

Signature: We	Date: 11/17/2014
(2) Legal Name of Inventor: Leathen Shi	
Signature:	Date:
(3) Legal Name of Inventor: Spyridon Skordas	
Signature:	Date:
(4) Legal Name of Inventor: Kevin R. Winstel	
Signature:	Date:

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Signature:	Date:
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Signature: Zatha 11	<u> Date: 1//14/2014</u>
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	Signature:	Dafe:
(2)	Legal Name of Inventor: Leathen Shi	
	Signature:	Date;
	Legal Name of Inventor: Spyridon Skordas	
	Signature: 19/1/1/ Myc/1/2	Date: 11 13 201
(4)	Legal Name of Inventor: Kevin R. Winstel	
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Signature;	Date:
(4) Legal Name of Inventor: Kevin R. Winstel	
Signature: <u>La R Wintl</u>	Date: 11/17/2014

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PATENT REEL: 042063 FRAME: 0505

RECORDED: 04/19/2017