504365109 05/12/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEV	NEW ASSIGNMENT					
NATURE OF CONVEYANCE:		ASS	ASSIGNMENT					
CONVEYING PARTY	DATA							
		Name	Name			Execution Date		
AELAN MOSDEN						04	4/24/2017	
KAUSHIK KUMAR						04	4/24/2017	
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State/Country:	JAPAN	JAPAN						
Postal Code:	107-63	107-6325						
Application Number: CORRESPONDENCE	DATA	15491786]			
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			ECTRON U.S. HOLDI	NGS,	INC.			
•			GROVE BLVD.					
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ATTORNEY DOCKET I	NUMBER:	ТТС	A-671US1-PRI					
NAME OF SUBMITTER:			MANUEL B. MADRIAGA					
SIGNATURE:			/Manuel B. Madriaga/					
DATE SIGNED:			2/2017					
Total Attachments: 3		I						
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DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR NONPROVISIONAL UTILITY OR DESIGN PATENT APPLICATION

Title of Invention: Process Integration Techniques Using A Carbon Layer To Form Self-Aligned Structures

As a below named inventor, I hereby declare that:

This declaration and assignment is directed to:

The attached application having a docket number and title identifiedabove, orUnited States application number or PCT international application number15/491786filed onApril 19, 2017

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 above-identified application.

I have reviewed and understand the contents of the above-identified 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.

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.

Assignor(s): The Assignor(s) is/are the undersigned inventor(s). The inventor(s) named below has/have made certain inventions, improvements, and/or discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application.

Assignee: The Assignee is **Tokyo Electron Limited**, a corporation of Japan having a place of business at Tokyo, Japan (herein referred to as the "ASSIGNEE"). The term "ASSIGNEE" used herein includes successors, legal representatives, and assigns of the ASSIGNEE. The ASSIGNEE desires to acquire the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents obtained from the Invention.

As an undersigned inventor, I hereby assign to the ASSIGNEE my entire worldwide right, title, and interest in and to the Invention, the above-identified United

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PATENT REEL: 042356 FRAME: 0243 States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefrom 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, granted for the invention, to the ASSIGNEE, and I authorize and request foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE. The entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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. 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, for the ASSIGNEE, whenever requested by the ASSIGNEE.

As an undersigned inventor, I acknowledge prior and ongoing obligations to sell, assign, and/or transfer my rights in the Invention to the ASSIGNEE. I have not sold, assigned, or otherwise transferred my rights in the Invention to another, and I am under no obligation to sell, assign, or otherwise transfer my rights in the Invention to another. I also hereby grant the ASSIGNEE, the right to insert in this Declaration and Assignment any further identification (including, but not limited to, patent application number and filing date) which may be necessary or desirable for recording this Declaration and Assignment.

(1) Legal name of Inventor:	Aelgn Mosden					
Inventor's Signature:	Date: 1/24/17					
Residence City/State/Country:	Poughkeepsie, NY, US					
Mailing Address:	, 3 Justbrand Lane, Poughkeepsie, NY 12603					
Citizenship:	US					
(2) Legal name of Inventor:	Kaushik Kumar					
Inventor's Signature:	Date:					
Residence City/State/Country:	Heverlee, Belgium					
Mailing Address:	Mezenlaan 4, 3001 Heverlee, Belgium					
Citizenship:	US					

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Atty. Docket No. TTCA-671US1-PRI

States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefrom 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, granted for the invention, to the ASSIGNEE, and I authorize and request foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE. The entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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. 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, for the ASSIGNEE, whenever requested by the ASSIGNEE.

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(1) Legal name of Inventor:	Aelan Mosden
Inventor's Signature:	Date:
Residence City/State/Country:	Poughkeepsie, NY, US
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(2) Legal name of Inventor:	Kaushik Kumar					
Inventor's Signature:	Allacustur.	Date: Nor 24, 2017				
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RECORDED: 05/12/2017