505191936 11/15/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5238705

SUBMISSION TYPE:	V ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
SARAH BOBEK	11/13/2018
PRASHANT KUMAR KULSHRESHTHA	11/06/2018
RAJESH PRASAD	11/06/2018
KWANGDUK DOUGLAS LEE	11/06/2018
HARRY WHITESELL	11/12/2018
HIDETAKA OSHIO	11/06/2018
DONG HYUNG LEE	11/12/2018
DEVEN MATTHEW RAJ MITTAL	11/12/2018

RECEIVING PARTY DATA

Name:	APPLIED MATERIALS, INC.	
Street Address:	3050 BOWERS AVENUE	
City:	SANTA CLARA	
State/Country:	CALIFORNIA	
Postal Code:	95054	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16188514	

CORRESPONDENCE DATA

Fax Number: (713)623-4846

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.

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ATTORNEY DOCKET NUMBER:	025770US02
NAME OF SUBMITTER:	CHAD DOUGHERTY
SIGNATURE:	/CHAD DOUGHERTY/

PATENT 505191936 REEL: 047511 FRAME: 0237

 DATE SIGNED:
 11/15/2018

 Total Attachments: 3

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PATENT REEL: 047511 FRAME: 0238

Atty Dkt No.: 025770US02

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Sarah BOBEK 1900 Scott Boulevard, Apt. 10 Santa Clara, California 95050	2)	Prashant Kumar KULSHRESHTHA 3200 Zanker Rd, Unit 2202 San Jose, California 95134
3)	Rajesh PRASAD 76 Hill Street Lexington, Massachusetts 02421	4)	Kwangduk Douglas LEE 384 Gunter Lane Redwood City, California 94065
5)	Harry WHITESELL 957 Durlane Ct Sunnyvale, California 94087	6)	Hidetaka OSHIO Kaji-cyo 2-9-8-403, Chiyoda-ku Tokyo 1010044 JAPAN
7)	Dong Hyung LEE 209 Sutton Circle Danville, California 94506	8)	Deven Matthew Raj MITTAL 34 Central Street Middleton, Massachusetts 01949

(hereinafter referred to as Assignors), have invented a certain invention entitled:

HIGHLY ETCH SELECTIVE AMORPHOUS CARBON FILM

enclosed herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall

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include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filling and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filling and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	11/13/2018 8:22:58 PM CST (DATE)	Sarah BOBEK
2)	11/6/2018 2:22:39 PM CST (DATE)	Prashant Kumar Kulshrishtha/ Prashant Kumar KULSHRESHTHA
3)		Pagesh Prasad/ Rajesh Prasad/ Rajesh PRASAD
4)	11/6/2018 4:13;34TEM CST	Docusigned by: /kwangduk Douglas Lu/ E259232CCA514B1 Kwangduk Douglas LEE
5)	11/12/2018 11:55:47 AM CS	DocuSigned by: Harry WHITESELL
6)	2018/11/06 19:10:06 CST	DocuSigned by:
7)	11/12/2018 11:(份东市己) AM CS	Dong Hyung Lu JONG Hyung Lu Dong Hyung LEE

8) 11/12/2018 11: 44:11E) AM CS DocuSigned by: Atty Dkt No.: 025770US02

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