

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHIEN-TEH KAO	01/09/2019
TAE KYUNG WON	01/04/2019
CARL A. SORENSEN	03/05/2019
SANJAY D. YADAV	01/07/2019
YOUNG DONG LEE	01/06/2019
SHINICHI KURITA	01/08/2019
SOO YOUNG CHOI	01/05/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	APPLIED MATERIALS, INC.
<b>Street Address:</b>	3050 BOWERS AVENUE
<b>City:</b>	SANTA CLARA
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95054
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16221322
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(713)623-4846
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<b>ATTORNEY DOCKET NUMBER:</b>	APPM/44015851US
<b>NAME OF SUBMITTER:</b>	STEVEN H. VERSTEEG
<b>SIGNATURE:</b>	/Steven H. Versteeg/

<b>DATE SIGNED:</b>	03/13/2019
<b>Total Attachments: 2</b> source=44015851US01 US ASG 2019-03-05#page1.tif source=44015851US01 US ASG 2019-03-05#page2.tif	

Atty Dkt No.: 44015851US01

**ASSIGNMENT FOR APPLICATION FOR PATENT**

WHEREAS:

Names and Addresses of Inventors:

1)	Chien-Teh KAO 715 Starbush Drive Sunnyvale, California 94086	2)	Tae Kyung WON 1054 Belvedere Lane San Jose, California 95129
3)	Carl A. SORENSEN 4566 E. Dunne Avenue Morgan Hill, California 95037	4)	Sanjay D. YADAV 7103 Phyllis Avenue San Jose, California 95129
5)	Young Dong LEE 12Gil-17 1811-1902 (Bando U-Bora) Dongtan-Dae-Ro Hwaseong-Si; Gyeonggi-do; REPUBLIC OF KOREA	6)	Shinichi KURITA 1151 Cordelia Avenue San Jose, California 95129
7)	Soo Young CHOI 40369 Loro Place Fremont, California 94539		

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

**FILM STRESS CONTROL FOR PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION**

for which application for Letters Patent in the United States was filed on December 14, 2018, under Serial No. 16/221,322, executed on even date 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

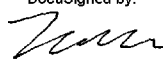
Atty Dkt No.: 44015851US01

conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall 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 filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing 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)	<u>1/9/2019</u> (DATE)	DocuSigned by: <i>Chien-Teh Kao</i> F8ABA208BCA5424 Chien-Teh KAO
2)	<u>1/4/2019</u> (DATE)	DocuSigned by:  08CFFF971058467 Tae Kyung WON
3)	<u>3/5/2019</u> (DATE)	DocuSigned by: <i>Carl A. Sorensen</i> D6C6EAC360DA489 Carl A. SORENSEN
4)	<u>1/7/2019</u> (DATE)	DocuSigned by: <i>Sanjay D. Yadav</i> 437145C39094463 Sanjay D. YADAV
5)	<u>1/6/2019</u> (DATE)	DocuSigned by: <i>Young Dong Lee</i> DE9398BC91374CE Young Dong LEE
6)	<u>1/8/2019</u> (DATE)	DocuSigned by: <i>Shinichi Kurita</i> 4AB08AEC719E452 Shinichi KURITA
7)	<u>1/5/2019</u> (DATE)	DocuSigned by: <i>Soo Young Choi</i> 094DAA2993CB431 Soo Young CHOI