PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIHENG ZHAO	07/15/2021
ABDUL AZIZ KHAJA	07/15/2021
PRASHANT KUMAR KULSHRESHTHA	07/15/2021
FANG RUAN	07/15/2021

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:	17077959

CORRESPONDENCE DATA

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KILPATRICK TOWNSEND & STOCKTON LLP **Correspondent Name:** Address Line 1: 1100 PEACHTREE STREET, SUITE 2800

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ATTORNEY DOCKET NUMBER:	80042-44018207US1-1209984
NAME OF SUBMITTER:	/RACHAEL MASCHKA/
SIGNATURE:	/Rachael Maschka/
DATE SIGNED:	07/15/2021

Total Attachments: 2

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PATENT REEL: 056872 FRAME: 0188 506769321

Attorney Docket No.: 080042-44018207US01-1209984

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Jiheng Zhao San Jose, CA	2)	Abdul Aziz Khaja San Jose, CA
3)	Prashant Kumar Kulshreshtha San Jose, CA	4)	Fang Ruan Milpitas, CA

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

CLEAN PROCESSES FOR BORON CARBON FILM DEPOSITION

for which application for Letters Patent in the United States was filed on October 22, 2020, under Application No. 17/077,959, 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 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 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, 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 therefor 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.

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- 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.

--- DocuSigned by:

1)	July 15, 2021	Jiheng Eliao 	
·	DATE	Jiheng Zhao	
2)	July 15, 2021	DocuSigned by: 3036632CDF854E5	
	DATE	Abdul Aziz Khaja	
3)	July 15, 2021	Prashant teuman teulshirishtha 830464864832443	
,	DATE	Prashant Kumar Kulshreshtha	
4)	July 15, 2021	Fang Ruan BB72B2A8DD3B441	
	DATE	Fang Ruan	