506511576 02/18/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6558352

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUWEI LIU	02/08/2021
WEN XIAO	02/08/2021
VIBHU JINDAL	02/14/2021
AZEDDINE ZERRADE	02/14/2021

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:	17157093

CORRESPONDENCE DATA

Fax Number:

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.

Email: Imurphy@dsiplaw.com
Correspondent Name: SERVILLA WHITNEY LLC
Address Line 1: 33 WOOD AVENUE SOUTH

Address Line 2: SUITE 830

Address Line 4: ISELIN, NEW JERSEY 08830

ATTORNEY DOCKET NUMBER: 44017689US04	
NAME OF SUBMITTER:	SCOTT S. SERVILLA
SIGNATURE:	/Scott S. Servilla, Reg. #40806/
DATE SIGNED:	02/18/2021

Total Attachments: 2 source=00980479#page1.tif source=00980479#page2.tif

PATENT 506511576 REEL: 055320 FRAME: 0982

Attorney Docket No. 44017689US04

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS: Names and Addresses of Inventors

1)	Shuwei Liu BLK121A, Kim Tian Place, #28-68 Singapore, 161121 Singapore
2)	Wen Xiao 20 Teban Gardens Road, #35-109 Singapore, 600020 Singapore
3)	Vibhu Jindal 3904 Wellington Sq. San Jose, CA 95136 United States of America

4)	Azeddine Zerrade 32 Dover Rise #11-08 Singapore, 138686
	Singapore

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

"Extreme Ultraviolet Mask Blank Hard Mask Materials"

for which application for Letters Patent in the United States was filed on Jan 25, 2021,

under Serial No. 17157093, 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, CA, 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 the Application), and the invention disclosed therein (hereinafter referred to as the 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 the 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.

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- 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 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)	2/8/2021	, 2021	Showei Lin / Showei Lin (INVENTOR) Showei Liu	/
2)	2/8/2021	, 2021	/	/
3)	2/14/2021	, 2021	/ Docusigned by: / Viblu Jindal	/_
4)	2/14/2021	, 2021	Docusigned by: Lycldine Errade	/_

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RECORDED: 02/18/2021