PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT7594851

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
XI CEN	08/29/2022
KAI WU	08/29/2022
DIXIONG WANG	09/20/2022
YI LUO	10/05/2022

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:	17654077		

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.

Phone: 7136234844

Email: abrewster@pattersonsheridan.com,

psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON + SHERIDAN, LLP

Address Line 1: 24 GREENWAY PLAZA, SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

ATTORNEY DOCKET NUMBER:	44020190US01
NAME OF SUBMITTER:	MARCUS HAMMACK
SIGNATURE:	/Marcus W. Hammack/
DATE SIGNED:	10/17/2022

Total Attachments: 4

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> PATENT REEL: 061445 FRAME: 0381

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Xi CEN c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue	2)	Kai WU c/o Applied Materials, Inc., Law Dept., M/S 1269 3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054
3)	Dixiong WANG c/o Applied Materials, Inc.,	4)	Yi LUO 616 Park View Dr., Apt. 401
	Law Dept., M/S 1269		Santa Clara, California 95054
	3050 Bowers Avenue		
	Santa Clara, California 95054		

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

TUNGSTEN MOLYBDENUM STRUCTURES

for which application for Letters Patent in the United States was filed on March 9, 2022, under Serial No. 17/654,077, 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.
- 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, 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)	8/29/2022	(DATE)	Xi CEN 7972318AAB234B8 XI CEN
2)	8/29/2022	(DATE)	Docusigned by: /tai WW 3C1FCEC77662470 Kai WU
3)	9/20/2022	(DATE)	Dixiong WANG Dixiong WANG
4)		(DATE)	VILLIO

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

	XICEN		Kai WU
1)	c/o Applied Materials, Inc.,	2)	c/o Applied Materials, Inc.,
	Law Dept., M/S 1269		Law Dept., M/S 1269
	3050 Bowers Avenue		3050 Bowers Avenue
	Santa Clara, California 95054		Santa Clara, California 95054
	Dixiong WANG		YI LUO
3)	c/o Applied Materials, Inc.,	4)	616 Park View Dr., Apt. 401
	Law Dept., M/S 1269		Santa Clara, California 95054
	3050 Bowers Avenue		
	Santa Clara, California 95054		

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- 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)		(DATE)	XICEN
2)		(DATE)	Kai WU
3)		(DATE)	Dixiong WANG
4)	10/5/2022	(DATE)	DocuSigned by: