## 503401747 07/21/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3448381

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XIAOLAN BA	05/12/2015
RAASHINA HUMAYUN	07/06/2015
MICHAL DANEK	05/12/2015
LAWRENCE SCHLOSS	05/15/2015

## **RECEIVING PARTY DATA**

Name:	LAM RESEARCH CORPORATION
Street Address:	4650 CUSHING PARKWAY
City:	FREMONT
State/Country:	CALIFORNIA
Postal Code:	94538

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14723270

### **CORRESPONDENCE DATA**

**Fax Number:** (510)663-0920

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:** 5106631100

**Email:** sarmstrong@wavsip.com

Correspondent Name: WEAVER AUSTIN VILLENEUVE & SAMPSON LLP

Address Line 1: P.O. BOX 70250

Address Line 4: OAKLAND, CALIFORNIA 94612

ATTORNEY DOCKET NUMBER:	LAMRP184_3601-1US
NAME OF SUBMITTER:	SARAH ARMSTRONG
SIGNATURE:	/Sarah Armstrong/
DATE SIGNED:	07/21/2015

#### **Total Attachments: 4**

source=3601-1US\_LAMRP184\_Assignment\_executed#page1.tif source=3601-1US\_LAMRP184\_Assignment\_executed#page2.tif source=3601-1US\_LAMRP184\_Assignment\_executed#page3.tif

PATENT 503401747 REEL: 036146 FRAME: 0820

 $source = 3601\text{-}1US\_LAMRP184\_Assignment\_executed \# page 4.t if$ 

PATENT REEL: 036146 FRAME: 0821

### ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned named inventor, possess the right, title and interest for and in the Invention(s) as set forth in the patent application entitled: DEPOSITION OF LOW FLUORINE TUNGSTEN BY SEQUENTIAL CVD PROCESS (Atty. Docket No. LAMRP184/3601-1US), and

TO NOTICE DE SEQUE TENDE END TROCESS (Titty: Docket No. Extend 104/3001-103), and		
(1) for which I have executed a U.S. patent application;		
AND/OR		
(2) the same having been filed on (May 27, 2015) as Application No. (14/723,270);		
OR		
(3) which is a U.S. Provisional Patent Application filed on () as Application No. ();		
in connection with which I hereby authorize and request the assignee's attorneys associated with Customer Number 83422 to insert within the foregoing parentheses the filing date and/or Application No. of said application when known.		
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned named inventor, hereby:		
1) Sell, assign and transfer to Lam Research Corporation, a Delaware corporation having a place of business at 4650 Cushing Parkway, Fremont, CA 94538 ("ASSIGNEE"), the entire right, title and interest in the above-referenced application including any and all improvements and inventions disclosed therein, and in applications based upon, and patents (including foreign patents and the right to claim priority) granted upon, the above-referenced application.		

- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative, and shall be binding upon the named inventor, as well as the named inventor's heirs, legal representatives and assigns.

Assign US Patent Application (No Notary)

5) Warrant and represent that I have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

Signed on the date indicated beside my signature.

1)	Signature: Typed Name:	Xiaolan Ba	Date:	71046170
2)	Signature: Typed Name:	Raashina Humayun	Date:	
3)	Signature: Typed Name	Michal Danck	Date:	5/12/18
4)	Signature: Typed Name:	Lawrence Schloss	Date:	5/15/15

# ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned named inventor, possess the right, title and interest for and in the

Invention(s) as set forth in the patent application entitled: DEPOSITION OF LOW FLUORINE TUNGSTEN BY SEQUENTIAL CVD PROCESS (Atty. Docket No. LAMRP184/3601-1US), and
(1) for which I have executed a U.S. patent application;
AND/OR
(2) the same having been filed on (May 27, 2015) as Application No. (14/723,270);
OR
(3) which is a U.S. Provisional Patent Application filed on () as Application No. ();
in connection with which I hereby authorize and request the assignee's attorneys associated with Customer Number 83422 to insert within the foregoing parentheses the filing date and/or Application No. of said application when known.
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned named inventor, hereby:
Sell, assign and transfer to Lam Research Corporation, a Delaware corporation having a place of business at 4650 Cushing Parkway, Fremont, CA 94538 ("ASSIGNEE"), the entire right, title and interest in the above-referenced application including any and all improvements and inventions disclosed therein, and in applications based upon, and patents (including foreign patents and the right to claim priority) granted upon, the above-referenced application.
Authorize and request-the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative, and shall be binding upon the named inventor, as well as the named inventor's heirs, legal representatives and assigns.

Assign US Patent Application (No Notary)

5)	Warrant and represent that I have not entered, and will not enter into any assignment,
contrac	t, or understanding that conflicts with this assignment.

Signed on the date indicated beside my signature.

1)	Signature: Typed Name:	Xiaolan Ba	Date:
2)	Signature: Typed Name:	Raashina Humayun	Date: 7/6/2015
3)	Signature: Typed Name:	Michal Danek	Date:
4)	Signature:	Lawrence Schloss	Date:

Assign US Patent Application (No Notary)

**RECORDED: 07/21/2015**