

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4809928

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SILVIA AGUILAR	01/11/2018
DEREK WITKOWICKI	01/10/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LAM RESEARCH CORPORATION
<b>Street Address:</b>	4650 CUSHING PARKWAY
<b>City:</b>	FREMONT
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94538
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15594118
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)749-6901
<i>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.</i>	
<b>Phone:</b>	4087746914
<b>Email:</b>	ken.wright@mpiplaw.com
<b>Correspondent Name:</b>	KENNETH WRIGHT
<b>Address Line 1:</b>	710 LAKEWAY DRIVE
<b>Address Line 2:</b>	SUITE 200
<b>Address Line 4:</b>	SUNNYVALE, CALIFORNIA 94085
<b>ATTORNEY DOCKET NUMBER:</b>	LAM2P969
<b>NAME OF SUBMITTER:</b>	KENNETH D. WRIGHT
<b>SIGNATURE:</b>	/Kenneth D. Wright/
<b>DATE SIGNED:</b>	02/05/2018
<b>Total Attachments: 2</b>	
source=LAM2P969_US_Assign_Aguilar_efiled#page1.tif	
source=LAM2P969_US_Assign_Witkowicki_efiled#page1.tif	

## ASSIGNMENT OF PATENT APPLICATION

Whereas we the undersigned inventors have invented certain new and useful improvements as set forth in the patent application entitled:

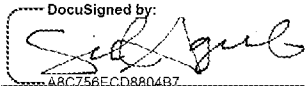
### **Halogen Removal Module and Associated Systems and Methods**

for which we have executed an application for a United States Letters Patent (U.S. Patent Application No. 15/594,118, filed on May 12, 2017, Attorney Docket No. LAM2P969).

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we the undersigned inventors 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 U.S.** (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in 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(s), continuation(s), substitutes(s) or reissue(s) 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 and 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 inventor(s), as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

Signed on the dates indicated beside my signature.

- |    |   |                 |
|----|---|-----------------|
| 1) | Signature: <br><small>DocuSigned by:<br/>ABC756ECD8804B7</small> | Date: 1/11/2018 |
|    | -----   |                 |
|    | Typed Name: Silvia Aguilar  |                 |
|    |   |                 |
| 2) | Signature: _____  | Date: _____     |
|    | -----   |                 |
|    | Typed Name: Derek Witkowicki  |                 |

## ASSIGNMENT OF PATENT APPLICATION

Whereas we the undersigned inventors have invented certain new and useful improvements as set forth in the patent application entitled:

### Halogen Removal Module and Associated Systems and Methods

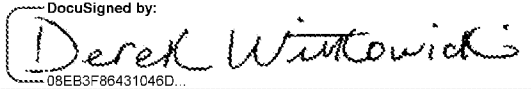
for which we have executed an application for a United States Letters Patent (U.S. Patent Application No. 15/594,118, filed on May 12, 2017, Attorney Docket No. LAM2P969).

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we the undersigned inventors 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 U.S. (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in 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(s), continuation(s), substitutes(s) or reissue(s) 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 and 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 inventor(s), as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

Signed on the dates indicated beside my signature.

1) Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Typed Name: Silvia Aguilar

2) Signature:  \_\_\_\_\_ Date: 1/10/2018  
 Typed Name: Derek Witkowicki