

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5060191

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KARI THORKELSSON	07/18/2018
RICHARD G. ABRAHAM	07/18/2018
STEVEN T. MAYER	07/16/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LAM RESEARCH CORPORATION
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<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>	16040407
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(510)663-0920
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<b>ATTORNEY DOCKET NUMBER:</b>	LAMRP333/4231-2US
<b>NAME OF SUBMITTER:</b>	APRIL SCOTT
<b>SIGNATURE:</b>	/April Scott/
<b>DATE SIGNED:</b>	07/20/2018
<b>Total Attachments: 3</b>	
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## 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 ELECTRO-OXIDATIVE METAL REMOVAL IN THROUGH MASK INTERCONNECT FABRICATION (Atty. Docket No. LAMRP333/4231-2US), and

(1) for which I have executed a U.S. patent application;

AND/OR

(2) the same having been filed on (July 19, 2018) as Application No. (16/040,407);

OR

(3) which is a U.S. Provisional Patent Application filed on (\_\_\_\_\_) as Application No. (\_\_\_\_);


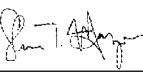
in connection with which I hereby authorize and request the assignee's attorneys associated with Customer Number 83422 to insert within the foregoing parentheses the filing date and/or Application No. of said application when known.

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, including the right to claim priority, in the above-referenced application including any and all improvements and inventions disclosed therein, and in U.S. and foreign applications based upon, and U.S. and foreign patents 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.

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: Kari Thorkelsson Date: 7/18/2018
  
- 2) Signature: \_\_\_\_\_  
Typed Name: Richard G. Abraham Date: \_\_\_\_\_
  
- 3) Signature:   
Typed Name: Steven T. Mayer Date: 7/16/2018

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: \_\_\_\_\_ Date: \_\_\_\_\_  
Typed Name: Kari Thorkelsson

2) Signature: Richard G. Abraham Date: 07/18/2018  
Typed Name: Richard G. Abraham

3) Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Typed Name: Steven T. Mayer