

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT4033492

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ARPAN MAHOROWALA	08/30/2016
ISHTAK KARIM	08/30/2016
PURUSHOTTAM KUMAR	08/25/2016
SHANKAR SWAMINATHAN	08/26/2016
ADRIEN LAVOIE	08/25/2016
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:	15253546
CORRESPONDENCE DATA	
Fax Number:	(510)663-0920
<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>	
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:	LAMRP291/4030-1US
NAME OF SUBMITTER:	SARAH ARMSTRONG
SIGNATURE:	/Sarah Armstrong/
DATE SIGNED:	08/31/2016
Total Attachments: 4	
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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 HIGH DRY ETCH RATE MATERIALS FOR SEMICONDUCTOR PATTERNING APPLICATIONS (Atty. Docket No. LAMRP291/4030-1US), and

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

AND/OR

(2) the same having been filed on (August 31, 2016) as Application No. (15/253,546);

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.

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: 8/30/2016 |
| | Typed Name: Arpan Mahorowala | |
| 2) | Signature: _____ | Date: _____ |
| | Typed Name: Ishtak Karim | |
| 3) | Signature: _____ | Date: _____ |
| | Typed Name: Purushottam Kumar | |
| 4) | Signature: _____ | Date: _____ |
| | Typed Name: Shankar Swaminathan | |
| 5) | Signature: _____ | Date: _____ |
| | Typed Name: Adrien LaVoie | |

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
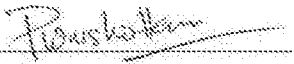
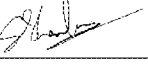
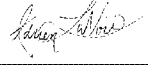
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Signed on the date indicated beside my signature.

- | | | |
|----|---|-----------------|
| 1) | Signature: _____
Typed Name: Arpan Mahorowala | Date: _____ |
| 2) | Signature:  _____
Typed Name: Ishtak Karim | Date: 8/30/2016 |
| 3) | Signature:  _____
Typed Name: Purushottam Kumar | Date: 8/25/2016 |
| 4) | Signature:  _____
Typed Name: Shankar Swaminathan | Date: 8/26/2016 |
| 5) | Signature:  _____
Typed Name: Adrien LaVoie | Date: 8/25/2016 |