502652503 01/27/2014

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2699112

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------------|----------------|
| BRADFORD J. LYNDAKER | 01/08/2014 |
| JOHN C. VALCORE JR. | 01/25/2014 |
| ALEXEI MARAKHTANOV | 01/09/2014 |
| SEYED JAFAR JAFARIAN-TEHRANI | 01/08/2014 |
| ZHIGANG CHEN | 01/09/2014 |

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: | 14152729 | |

CORRESPONDENCE DATA

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Correspondent Name: NISHITKUMAR V. PATEL Address Line 1: 710 LAKEWAY DRIVE

Address Line 2: SUITE 200

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| ATTORNEY DOCKET NUMBER: | LAM2P787 |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | NISHITKUMAR V. PATEL |
| | TAIENI |

502652503 REEL: 032052 FRAME: 0759

| Signature: | /Nishitkumar V. Patel/ | |
|---|------------------------|--|
| Date: | 01/27/2014 | |
| Total Attachments: 3 source=LAM2P787_Efiled_Assigns#page1.tif source=LAM2P787_Efiled_Assigns#page2.tif source=LAM2P787_Efiled_Assigns#page3.tif | | |

PATENT REEL: 032052 FRAME: 0760

ASSIGNMENT OF PATENT APPLICATION

(Accompanying Application)

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

CONTROL OF ETCH RATE USING MODELING, FEEDBACK AND IMPEDANCE MATCH

(Atty, Docket No. LAM2P787/3278) for which we have executed an application for a United States Letters Patent.

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 <u>Lam Research Corporation</u>, a <u>Delaware</u> corporation having a place of business at <u>4650 Cushing Parkway Fremont</u>, <u>CA 94538 U.S.</u> (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 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 our signatures.

| 1) | Signature: Typed Name: | Bradford J. Lyndaker | Date: | 01/08/14 |
|----|---------------------------|------------------------------|-------|------------|
| 2) | Signature: Typed Name: | John C. Valcore, Jr. | Date: | |
| 3) | Signature: Typed Name: | Alexei Marakhtanov | Date: | |
| 4) | Signature: Typed Name: | Seyed Jafar Jafarian-Tehrani | Date: | 1/8/2014 |
| 5) | Signature: Typed Name: | Zhigang Chen | Date: | 01/09/2014 |

Attorney Docket No. LAM2P787/3278

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|----|---------------------------|------------------------------|-------|-----------|
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| 3) | Signature: Typed Name: | Alexei Marakhtanov | Date: | 01-09-201 |
| 4) | Signature: Typed Name: | Seyed Jafar Jafarian-Tehrani | Date: | |
| 5) | Signature: Typed Name: | Zhigang Chen | Date: | |

Attorney Docket No. LAM2P787/3278

ASSIGNMENT OF PATENT APPLICATION

(Accompanying Application)

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

CONTROL OF ETCH RATE USING MODELING, FEEDBACK AND IMPEDANCE MATCH

(Atty. Docket No. LAM2P787/3278) for which we have executed Application No. 14/152,729, filed on January 10, 2014 for a United States Letters Patent.

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 <u>Lam Research Corporation</u>, a <u>Delaware</u> corporation having a place of business at <u>4650 Cushing Parkway Fremont</u>, <u>CA 94538 U.S.</u> (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.
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| 3) | Signature: Typed Name: | Alexei Marakhtanov | Date: | |
| 4) | Signature: Typed Name: | Seyed Jafar Jafarian-Tehrani | Date: | |
| 5) | Signature: Typed Name: | Zhigang Chen | Date: | |
| Attorne | y Docket No. LAN | /12P787/3278 | | |

PATENT

REEL: 032052 FRAME: 0763

RECORDED: 01/27/2014