

12/22/04

01-12-2005



ASSIGNMENT RI
-P.

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To: Honorable Assistant Commissioner of Patents:

Please record the attached original document(s) or copy thereof.

1. Name of conveying party(ies)

- a) David PIRKLE
- b)

2. Name and address of receiving party(ies):

- a) Name: Lam Research Corporation
- Address: 4650 Cushing Parkway
Fremont, CA 94538

3. Nature of conveyance

- | | | | |
|-------------------------------------|--------------------|--------------------------|-------------------|
| <input checked="" type="checkbox"/> | Assignment | <input type="checkbox"/> | Merger |
| <input type="checkbox"/> | Security Agreement | <input type="checkbox"/> | Change of Name |
| <input type="checkbox"/> | Other _____ | <input type="checkbox"/> | License Agreement |

Execution Date: 12/20/2004

4. Application Number(s) or Patent Number(s): Filed Herewith

The title of the (new) application is:

APPARATUS AND METHODS FOR ARC DETECTION IN A PLASMA PROCESSING SYSTEM

5. Please send all correspondence concerning this (these) documents to:

CUSTOMER NUMBER 32,986
IPSG, P.C.
P. O. Box 700640
San Jose, CA 95170-0640
408-257-5500

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

- Enclosed
- Any additional fees are authorized to be charged to Deposit Account No. 50-2284 (Order No. LMRX-P057)

8. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

9. Date: December 22, 2004

Alexander Sousa
Registration No. 50,671

112963 U.S. PTO
11/023174

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(01/03/2005 SDENBOB1 00000057 11023174)
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ASSIGNMENT OF PATENT APPLICATION

WHEREAS I/we the undersigned inventor(s) have invented certain new and useful improvements as set for in the patent application entitled:

APPARATUS AND METHODS FOR ARC DETECTION IN A PLASMA PROCESSING SYSTEM

(Atty. Docket No.LMRX-P057/P1338) for which I (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, I/We the undersigned inventor(s) hereby:

- 1) Sell(s), assign(s) and transfer(s) to Lam Research Corporation, a Delaware corporation doing business at 4650 Cushing Parkway, Fremont, California 94538 (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.
- 6) Authorize ASSIGNEE'S legal representative to insert further identification necessary or desirable for recordation of this document.

Signed on the date(s) indicated beside my (our) signature(s).

Date: 12/20/04

Signature: David P. Pirkle
Typed Name: David PIRKLE