08-0	7-1998
M R D	EET
To the Honorable commissioner of Parallel Please record the attached original accuments QQQ	78,5804.
1. Name of conveying party(ies): Maria Barne Richard A. Gottscho and Vahid Vahedi	Name and address of receiving party(ies):     Name: LAM Research Corporation
Additional name(s) of conveying party(ies) attached? Yes X No	Street Address: 4650 Cushing Parkway  City: Freemont
3. Nature of conveyance: x	State: CA Zip: 94538-6470
Other  Execution Date: June 29, 1998 and July 9, 1998	Additional name(s) & address(es) attached? Yes x No
If this document is being filed together with a new date of the application is:	
A. Patent Application No.(s)	B. Patent No. (s)
Additional numbers attach	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Heather B. Shapiro Cesari and McKenna, LLP	7. Total fee (37 CFR 3.41)
03/P376 Address: 30 Rowes Wharf  65.501 City Boston State: 00 MA Zip: 02110	account  8. Deposit account no. 03-1237 (Attach duplicate copy of this page if paying by deposit account)
	USE THIS SPACE
9. Statement and signature.  To the best of my knowledge and belief, the foregoing infor copy of the original document.	emation is true and correct and any attached copy is a true
Steven J. Frank	Signature July 27, 1998
DECTOR OF A COMME	Total number of pages comprising cover sheet: 4

PATENT

REEL: 9357 FRAME: 0667

## ASSIGNMENT

Whereas We, Maria E. Barone, who reside at 953 Robin Way, Sunnyvale, CA 94087, Richard A. Gottscho, who reside at 4990 Lapis Lane, Pleasanton, CA 94566, and Vahid Vahedi, who reside at 1503 Posen Avenue, Albany, CA 94706, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled Method and Apparatus for Predicting Plasma-Process Surface Profiles, identified by Cesari and McKenna File No. 112028-0014, the specification of which was filed on March 3, 1998, and accorded Serial Number 09/033,997; and

Whereas LAM Research Corporation, whose address is 4650 Cushing Parkway, Freemont, CA 94538-6470, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

Now, Therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- Assign, transfer, and convey to Assignee our entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct;
- Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same Assignee without encumbrance;
- Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this assignment had not been made; and

PATENT REEL: 9357 FRAME: 0668 particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to our names.

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Date	Maria E Baro	ne, Inventor		
reserve of Children	in K in xixim			
Commonwealth of Massachus	setts )			
	)ss.			
County of	)			
the foregoing instrument, and deed.	ne/sne acknow	ledged the sa	me to be his/her/1	ree act and
	•	Notary 1	Public , /	
[seal]				
COMM. Notary Publi ALAMED	MALONEY # 1059797 c — California A COUNTY bires JUN 30, 1999			

REEL: 9357 FRAME: 0669

7-19/98	Richard Joth
Date	Richard A. Gottscho, Inventor
Commonwealth of Massachu	)ss.
County of Mandal	<u> </u>
Gottscho, to me known and	of, 1998, before me appeared Richard A. known to me to be the person described in and who executed d he/she acknowledged the same to be his/her free act and
LAURA B. MALON COMM. # 10597 Notary Public — Co ALAMEDA COUI My Comm. Expires JUN	Notary Public
<u>e/29/98</u>	a ballad laked:
Date	Vahid Vahedi, Inventor
Commonwealth of Massachu	
County of Andrew A	
On this day of to me known and known to	of, 1998, before me appeared Vahid Vahedi, me to be the person described in and who executed the same to be his/her free act and deed.
LAURA B. MALONEY COMM. # 1059797 Notary Public — California ALAMEDA COUNTY My Comm. Expires JUN 30, 194	Notary Public

RECORDED: 07/27/1998

REEL: 9357 FRAME: 0670