Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY DATA			
		Vame	Execution Date
Russell J. LOW 12/21/2006			
RECEIVING PARTY DATA			
Name:	Varian Semiconductor Equipment Associates, Inc.		
Street Address:	35 Dory Road		
City:	Gloucester		
State/Country:	MASSACHUSETTS		
Postal Code: 01930			
PROPERTY NUMBERS Total: 1			
Property Type		Number	
Application Number: 11615		5386	
Application Number: 11615386 CORRESPONDENCE DATA CORRESPONDENCE DATA			
CORRESPONDENCE	DATA		N
Fax Number:	(202)778-2201		
Fax Number:	(202)778-2201	hen the fax attempt is unsuccessful.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fax Number: <i>Correspondence will b</i> Phone: Email:	(202)778-2201 De sent via US Mail w 202-955-1500 andersont@hu	when the fax attempt is unsuccessful.	\$40.00 \$
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name:	(202)778-2201 <i>be sent via US Mail w</i> 202-955-1500 andersont@hu Hunton & Willia	<i>when the fax attempt is unsuccessful.</i> Inton.com ams LLP	
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name: Address Line 1:	(202)778-2201 De sent via US Mail w 202-955-1500 andersont@hu Hunton & Willia 1900 K Street,	<i>when the fax attempt is unsuccessful.</i> Inton.com ams LLP	\$40.00 \$
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name:	(202)778-2201 be sent via US Mail w 202-955-1500 andersont@hu Hunton & Willia 1900 K Street, Suite 1200	<i>when the fax attempt is unsuccessful.</i> Inton.com ams LLP	\$40.00 \$
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	(202)778-2201 be sent via US Mail w 202-955-1500 andersont@hu Hunton & Willia 1900 K Street, Suite 1200 Washington, D	<i>when the fax attempt is unsuccessful.</i> Inton.com ams LLP NW	\$40.00 \$
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	(202)778-2201 be sent via US Mail w 202-955-1500 andersont@hu Hunton & Willia 1900 K Street, Suite 1200 Washington, D	when the fax attempt is unsuccessful. Inton.com ams LLP NW DISTRICT OF COLUMBIA 20006	\$40.00 \$

PATENT REEL: 018672 FRAME: 0881

PATENT REEL: 018672 FRAME: 0882

source=DOC031#page4.tif

ASSIGNMENT

WHEREAS, the undersigned, to wit:

(1) Russell J. LOW

(hereinafter collectively ASSIGNOR), has/have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled:

"TECHNIQUES FOR REDUCING CONTAMINATION DURING ION IMPLANTATION"

- (X only one) (a) ____ which was executed concurrently herewith and is being filed herewith in the United States Patent and Trademark Office;
 - (b) _____, which was executed on _____, 20___, and is being filed herewith in the United States Patent and Trademark Office;
 - (C) X which was filed as U.S. Patent Application No. 11/615,386 on December 22, 2006;

AND WHEREAS, Varian Semiconductor Equipment Associates, Inc. (hereinafter ASSIGNEE), a corporation organized and existing under the laws of the State of Delaware, and having its principal place of business at 35 Dory Road, Gloucester, MA 01930, is desirous of acquiring the entire right, title, and interest in and to said invention and any and all patents that may be obtained therefor, and in and to said application and any and all patents that may issue therefrom;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR does hereby sell, assign, transfer, and set over unto successors, assigns, and legal ASSIGNEE, its said representatives, all right, title, and interest in and to said invention throughout the world, and any and all patents of the United States and foreign countries that may be obtained therefor, and in and to said application, including any and all continuations, continuations-in-part, divisionals, reissues, reexaminations, substitutions, and extensions thereof, and any and all patents of the United States and foreign countries that may issue therefrom, such right, title, and interest including the right to file applications and obtain patents, utility models, industrial models, and designs for said invention in the name of

1

said ASSIGNEE, its successors, assigns, and legal representatives, throughout the world, including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention, and all rights to register said invention in appropriate registries;

ASSIGNOR also does hereby covenant that it has the full right to convey the entire right, title, and interest herein assigned, and that it has not and will not execute any agreement in conflict herewith;

ASSIGNOR also does hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application, including any continuations, continuations-in-part, divisions, reissues, re-examinations, substitutions, and extensions thereof, to said ASSIGNEE, its successors, assigns, and legal representatives as the ASSIGNEE of the entire right, title, and interest herein assigned;

ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the expense of said ASSIGNEE, its successors, assigns, or legal representatives, execute and deliver any and all papers, make all rightful oaths, and do all lawful acts that may be necessary or desirable to perfect the entire right, title, and interest herein assigned in said ASSIGNEE, its successors, assigns, and legal representatives, and generally do everything possible to vest the entire right, title, and interest herein assigned in legal assigns, and successors, its ASSIGNEE, said representatives;

ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the expense of said ASSIGNEE, its successors, assigns, or legal representatives, execute and deliver any and all papers, make all rightful oaths, and do all lawful acts that may be necessary or desirable to make application for and obtain any and all continuations, continuations-in-part, divisionals, reissues, reexaminations, substitutions, or extensions of said application, or any application on said invention, or any patent issuing therefor or therefrom;

ASSIGNOR also does hereby agree to, at any time, upon request, without further or additional consideration but at the

Patent Application Client Reference No.: 2006-049 Attorney Docket No.: 64981.000061

expense of said ASSIGNEE, its successors, assigns, or legal representatives, communicate to said ASSIGNEE, its successors, assigns, and legal representatives, any known facts relating to said invention or said application or any patent issuing therefor or therefrom, and testify as to the same in any interference or other litigation proceeding when requested to do so, and aid said ASSIGNEE, its successors, assigns, and legal representatives, in obtaining and enforcing proper protection for said invention in all countries;

ASSIGNOR also does hereby grant the firm of Hunton & Williams LLP of 1900 K Street, N.W., Washington, D.C., 20006-1109, or its agents, the power to insert on this assignment any further information, including but not limited to application number(s) and filing date(s), which may be necessary or desirable in order to comply with any rule or request of the United States Patent and Trademark office for the purposes of recording this document.

ASSIGNOR also does now hereby execute this document on the date(s) indicated below:

Patent Application Client Reference No.: 2006-049 Attorney Docket No.: 64981.000061

(1) IN WITNESS WHEREOF, I have hereunto set my hand and seal this $2\sqrt{2}$ day of $\sum e^{2}$, 2006.

Sign: Print Name: Russel'i J. LOW Print Address: 137 Hillside Street

nt Address: 137 Hillside Street Rowley, MA 01969

achisetts COMMONWEALTH/STATE OF / COUNTY OF

Before me, a Notary Public in and for the Commonwealth/State of <u>Assauluseff</u> did personally appear the above-named Russell J. LOW, personally known to me and/or proved to me on the basis of satisfactory evidence to be the person who signed and sealed the foregoing instrument and acknowledged the same to be his or her own free act and deed, this <u>2/5</u>^f day of <u>AMEMBER</u>, 2006.

Sign Notary Public

My Commission Expires

RITA G. BUDROW Notary Public Commonwealth of Massachusette y Commission Expires May 11, 2012

64981.000061 WASHINGTON 649398v1

4

RECORDED: 12/22/2006

REEL: 018672 FRAME: 0886