## PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Russell J. Low	10/15/2010
Kevin M. Daniels	10/04/2010
Bon-Woong Koo	10/04/2010
Richard M. White	10/04/2010
James W. Blanchette	10/04/2010

#### **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:	12912312

### **CORRESPONDENCE DATA**

Fax Number: (412)202-5017

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

 Phone:
 978-282-2000

 Email:
 sbartl@kdfirm.com

Correspondent Name: Varian Semiconductor Equipment Associate

Address Line 1: 35 Dory Road

Address Line 4: Gloucester, MASSACHUSETTS 01930-2297

ATTORNEY DOCKET NUMBER:	2009-081
NAME OF SUBMITTER:	Daniel N. Daisak

PATENT REEL: 025197 FRAME: 0486 OP \$40 00 129123

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Total Attachments: 5

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PATENT REEL: 025197 FRAME: 0487

#### **ASSIGNMENT**

WHEREAS, the undersigned, to wit:

Russell J. Low Kevin M. Daniels Bon-Woong Koo Richard M. White James W. Blanchette

(X only one):

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

# METHOD AND SYSTEM FOR IN-SITU MONITORING OF CATHODE ERSOSION AND PREDICTING CATHODE LIFETIME

(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)	which was filed as US Patent Application No, filed on

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, Massachusetts, 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 therefore, 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 said ASSIGNEE, its successors, assigns, and legal 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, re-examinations, 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 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;

PATENT REEL: 025197 FRAME: 0488 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, reexaminations, 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 here 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 said ASSIGNEE, its successors, assigns, and legal 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, divisions, reissues, re-examinations, substitutions, and 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 expense of said ASSIGNEE, its successors, assigns, and 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 property protection for said invention in all countries;

ASSIGNOR also does hereby grant the Legal Department of Varian Semiconductor Equipment Associates, Inc., at the address shown above, 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 REEL: 025197 FRAME: 0489

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 15 day of Color, 2010.
Name: Russell J. Low
COMMONWEALTH/STATE OF MASSACHUSETTS COUNTY OF ESSEX
Before me, a Notary Public 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 day of 10.
Notary Public Wy Commission Expires: Chicken 10, 2014
IN WITNESS WHEREOF, I have hereunto set my hand and seal this 4th day of october, 2010.
Name: Kevin M. Daniels
COMMONWEALTH/STATE OF MASSACHUSETTS COUNTY OF ESSEX
Before me, a Notary Public did personally appear the above-named KEVIN M. DANIELS, 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 day of day of
Constance J. O wellette  My Commission Expires: October 10, 2816  Notary Public  Constance S. Ossilina Notary Public

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 4th day of October, 2010.
Kor Barrons
Name: Bon-Woong Koo
COMMONWEALTH/STATE OF MASSACHUSETTS COUNTY OF ESSEX
Before me, a Notary Public did personally appear the above-named BON-WOONG KOO, 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 day of, 2010.
Constance S. Ouclienc  One Face A Quillet My Commission Expires: Notary Public  Notary Public  Notary Public  Constance S. Ouclience Notary Public  Constance S. Ouclience Notary Public  Constance S. Ouclience Notary Public
IN WITNESS WHEREOF, I have hereunto set my hand and seal this 4th day of October, 2010.  Name: Richard M. White
Name: Richard W. Writte
COMMONWEALTH/STATE OF MASSACHUSETTS COUNTY OF ESSEX
Before me, a Notary Public did personally appear the above-named RICHARD M. WHITE, 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 day of 2010.
Consessed S. Overliette  On Hance J. Quellette My Commission Expires: Notary Public  Notary Public  Notary Public  Notary Public  Notary Public  Ontary Public  Notary Public  Ontary Public  Notary Public  Notary Public

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unner	IN WITNESS WHEREOF, I have hereunto set my hand and seal this <u>o</u> 4 day of <u>Dor</u> , 2010,
enteres.	
Accessor	Name: James W. Blanchette
m	
minne	COMMONWEALTH/STATE OF MASSACHUSETTS
cocces	COUNTY OF ESSEX
nnn	Pefeza mai a Notani Bublic did persanally appear the above pamed IAMES W
2000000	Before me, a Notary Public did personally appear the above-named JAMES W.  BLANCHETTE, 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 the day of the day
men	free act and deed, this 40 day of October , 2010.
munic	Noney Public Vinney Public
	austance & Jullette My Commission Ex Me Commission Explose October 10, 2814
COCCOUNT	Notary Public
8888	HOWING WATER

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PATENT REEL: 025197 FRAME: 0492

**RECORDED: 10/26/2010**