

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Chunguang Xia</td> <td>10/15/2012</td> </tr> <tr> <td>Ramesh Chandrasekharan</td> <td>10/15/2012</td> </tr> <tr> <td>Karl Leeser</td> <td>10/15/2012</td> </tr> <tr> <td>Douglas Keil</td> <td>10/15/2012</td> </tr> <tr> <td>Edward J Augustinyak</td> <td>10/15/2012</td> </tr> </tbody> </table>		Name	Execution Date	Chunguang Xia	10/15/2012	Ramesh Chandrasekharan	10/15/2012	Karl Leeser	10/15/2012	Douglas Keil	10/15/2012	Edward J Augustinyak	10/15/2012
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RECEIVING PARTY DATA													
Name:	Novellus Systems, Inc.												
Street Address:	4000 N. First Street												
City:	San Jose												
State/Country:	CALIFORNIA												
Postal Code:	95134												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13659231</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13659231								
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Application Number:	13659231												
CORRESPONDENCE DATA													
Fax Number:	2486410270												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	248-641-1600												
Email:	sstevens@hdp.com												
Correspondent Name:	Harness, Dickey & Pierce, P.L.C.												
Address Line 1:	P.O. Box 828												
Address Line 4:	Bloomfield Hills, MICHIGAN 48303												
ATTORNEY DOCKET NUMBER:	NVLS003775												
NAME OF SUBMITTER:	Michael D. Wiggins												
	This document serves as an Oath/Declaration (37 CFR 1.63).												
Total Attachments: 3 source=Dec_Assign#page1.tif source=Dec_Assign#page2.tif source=Dec_Assign#page3.tif													

CH \$40.00 13659231

PATENT

**DECLARATION AND ASSIGNMENT<sup>1</sup>**

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application entitled:

**Suppression of Parasitic Deposition In A Substrate Processing System  
By Suppressing Precursor Flow And Plasma Outside Of Substrate Region**

As a below named inventor, I hereby declare that:

This declaration is directed to (check one):

- The attached application, or  
 United States application or PCT international application number  
filed on .

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.

I hereby acknowledge that any willful false statement made in this Declaration and Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

For good and valuable consideration, the receipt and adequacy whereof I hereby acknowledge, I hereby confirm any prior assignment to Novellus Systems, Inc., 4000 North First Street, San Jose, California 95134 (hereinafter "Assignee"), and to the extent that I have not already done so, agree to assign, and hereby do, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and

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<sup>1</sup> This form requires an ADS if one has not yet been filed.

**DECLARATION AND ASSIGNMENT**

throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the above-identified application, to the above-identified application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the above-identified application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by me had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

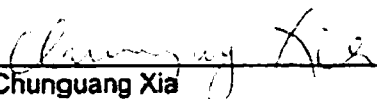
I hereby covenant and agree to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth.

I hereby covenant that I have not made and will not make any assignment, sale, license, agreement or encumbrance which would conflict with this Declaration and Assignment.


I hereby request the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and request that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

**DECLARATION AND ASSIGNMENT**

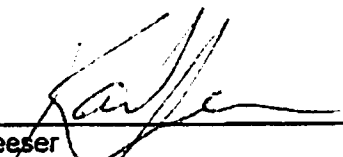
I hereby grant the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

  
\_\_\_\_\_  
Chunguang Xia

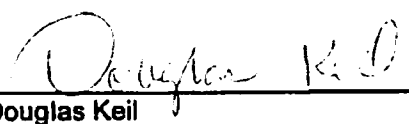
10/15/2012  
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Dated

  
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Ramesh Chandrasekharan

10/15/12  
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Dated

  
\_\_\_\_\_  
Karl Leeser

13 Oct 2012  
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Dated

  
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Douglas Keil

10/15/12  
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Dated

  
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Edward J. Augustinyak

10/11/2012  
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