

12-02-2002



102297960  
ASSIGNMENT REGISTRATION COVER SHEET  
-PATENTS ONLY-

11002 U.S. PTO  
10/303321  
11/21/02

To: Honorable Commissioner of Patents and Trademarks:

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

- 1. Name of conveying party(ies)
  - a) Patrick C. Joyce
  - b) Adrienne Tipton
  - c) Krishnan Shrinivasan
  - d) Dennis W. Hess
  - e) Satyanarayana Myneni
  - f) Galit Levitin

meo 11/21/02

- 2. Name and address of receiving party(ies):
  - a) Name: Novellus Systems, Inc.
  - Address: 3970 North First Street, San Jose, CA 95134

- 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:

- a) 11/2/02
- b) 11/6/02
- c) 11/6/02
- d) 10/16/02
- e) 10/16/02
- f) 10/16/02

- 4. Application Number(s) or Patent Number(s): NEW

The title of the (new) application is: 10303321

**SUPERCritical SOLUTIONS FOR CLEANING PHOTORESIST AND POST-ETCH RESIDUE FROM LOW-K MATERIALS**

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

11/27/2002 AAD0FD1 00000073 10303321  
03 FC:8021 40.00

**Beyer Weaver & Thomas, LLP**  
 P.O. Box 778  
 Berkeley, CA 94704-0778  
 Ph: (510) 843-6200  
 Fax: (510) 843-6203  
 (Customer Number: 022434)

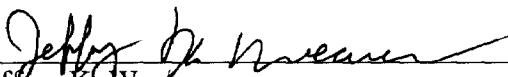
- 6. Total number of applications and patents involved: 1

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

- Enclosed
- Any additional fees are authorized to be charged to Deposit Account No. 500388 (Order No. NOVLP028X2 )

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.

Date: November 21, 2002

  
\_\_\_\_\_  
Jeffrey K. Weaver  
Registration No. 31,314

Attorney Docket No. NOVLP028X2/NVLS-000798

(Revised 12/01)

**PATENT**  
**REEL: 013523 FRAME: 0324**

# ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

## **SUPERCritical SOLUTIONS FOR CLEANING PHOTORESIST AND POST-ETCH RESIDUE FROM LOW-K MATERIALS**

(Atty. Docket No. NOVLP028X2/NVLS-000798), (check one)

- for which I have executed a U.S. patent application on even date herewith. (Accompanying)  
 which bears U.S. application No. \_\_\_\_\_. (Not accompanying)  
 which is a U.S. provisional application. (Accompanying)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:

- 1) Sell, assign and transfer to Novellus Systems, Inc., a California corporation having a place of business at 3970 North First Street, San Jose, CA 95134 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon (including foreign patents and the right to claim priority), the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue 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 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 representatives, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

1. Inventor Signature: Patrick C. Joyce  
Patrick C. Joyce

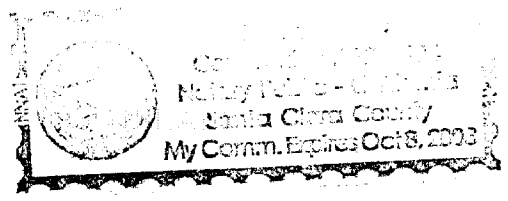
Date: 11/2/02

State of California )  
County of Santa Clara ) SS.

On this 2 day of November, in the year 2002, before me, Roland Tso, Notary Public, personally appeared Patrick C. Joyce, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature [Signature]



2. Inventor Signature: Adrienne Tipton  
Adrienne Tipton

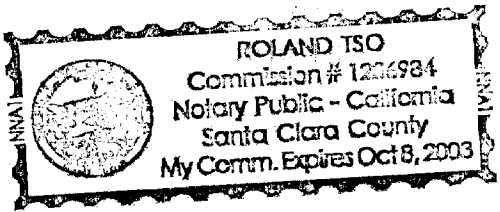
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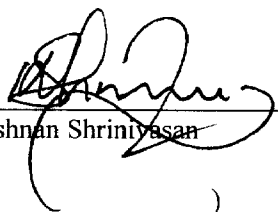
State of California )  
County of Santa Clara ) SS.

On this 6 day of November, in the year 2002, before me, Roland Tso, Notary Public personally appeared Adrienne Tipton, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature [Signature]



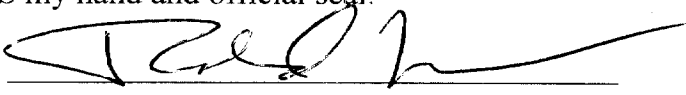
3. Inventor Signature:   
Krishnan Shrinivasan

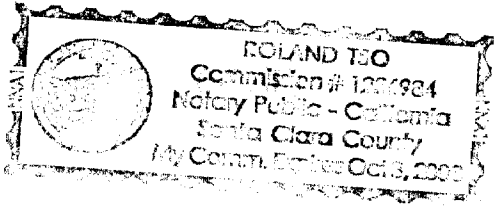
Date: 11/6/2002

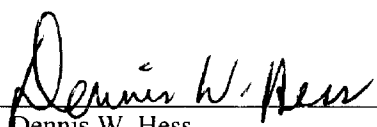
State of California )  
County of Santa Clara ) SS.

On this 6 day of November, in the year 2002, before me, Roland TSO, Notary Public, personally appeared Krishnan Shrinivasan, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature 



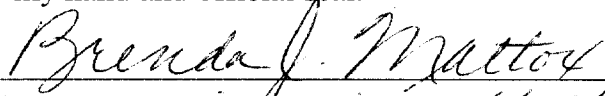
4. Inventor Signature:   
Dennis W. Hess

Date: 10/16/02

State of California )  
County of FULTON ) SS. 168-38-2901

On this 16 day of October, in the year 2002, before me, Dennis W. Hess, Notary Public, personally appeared Dennis W. Hess, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature   
My commission expires 6/29/05

5. Inventor Signature: M Satyanarayana Date: 10/16/02  
Satyanarayana Myneni

State of California )  
County of FULTON ) ss. 674 09 3883

On this 16 day of October, in the year 2002, before me, Satyanarayana Myneni, Notary Public, personally appeared Satyanarayana Myneni, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature Brenda J. Mattor  
My commission expires 6/29/05

6. Inventor Signature: [Signature] Date: 10/16/02  
Galit Levitin

State of California )  
County of FULTON ) ss. 674-14-6127

On this 16 day of October, in the year 2002, before me, Galit Levitin, Notary Public, personally appeared Galit Levitin personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature Brenda J. Mattor  
My commission expires 6/29/05