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## PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

## 1. Name of conveying party(ies)

Thomas N. Horsky  
John N. WilliamsAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance/Execution Date(s):

Execution Date(s) December 16 & 19, 2002, Respectively

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

## 2. Name and address of receiving party(ies)

Name: SemEquip, Inc.

Internal Address: \_\_\_\_\_

Street Address: 34 Sullivan Road, Unit #21City: BillericaState: MassachusettsCountry: U.S.A. Zip: 01862Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application or patent number(s):



This document is being filed together with a new application.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☐ No

## 5. Name and address to whom correspondence concerning document should be mailed:

Name: John S. Paniaguas

Internal Address: \_\_\_\_\_

Street Address: 525 West Monroe StreetCity: ChicagoState: Illinois Zip: 60662Phone Number: 312-902-5200Fax Number: 312-902-1061Email Address: johnnp@kattenlaw.com6. Total number of applications and patents involved: 17. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card  
☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

## 8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_b. Deposit Account Number 50-1214Authorized User Name John S. Paniaguas

## 9. Signature:

01/08/2007 DBYRNE 00000058 501214 11647924

01 FC:8021 40.00 DA

Signature

December 29, 2006

Date

John S. Paniaguas

Name of Person Signing

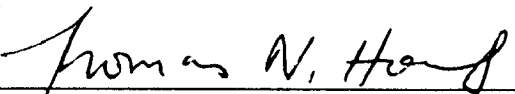
Total number of pages including cover sheet, attachments, and documents: Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450PATENT  
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**ASSIGNMENT**

IN CONSIDERATION of other good and valuable consideration, the receipt of which is hereby acknowledged, We, **Thomas Neil Horsky** residing at **816 Depot Road, Boxborough, Massachusetts 01719, County of Middlesex** and **John Noel Williams** residing at **168 Beacon Street, Residence #2, Boston Massachusetts 02116-1401, County of Suffolk** do hereby sell, assign and transfer unto **SemEquip, Inc.**, a corporation organized and existing under the laws of the State of **Delaware** having its principle place of business at **34 Sullivan Road, Unit #21, Billerica, Massachusetts 01862**, its successors, assigns and legal representatives, the entire right, title and interest for the United States and its territories, and all foreign countries, in and to the invention filed on June 12, 2002, assigned Application No. **10/170,512**, entitled **Ion Implantation Ion Source, System and Method** and as set forth in an application for an international patent application under the Patent Cooperation Treaty, filed December 13, 2000 and assigned Application No. **PCT/US00/33786**, as well as the following U.S. provisional patent applications upon which the international application claims priority: Serial No. **60/170,473**, filed December 13, 1999, and Serial No. **60/250,080**, filed November 30, 2000; and all the entire right, title and interest in and to any and all United States and foreign Letters Patents that may be granted for said invention, and all divisions, continuations, renewals, reissues, and extensions thereof, and the applications therefor, and the right to claim the priority of this international patent application in any U.S. and all foreign countries where application for patent on said invention may be filed; and we hereby agree to execute such other lawful documents and perform such other lawful acts as are requested for securing to said assignee, its successors, assigns and legal representatives, all of the rights to said invention.

**WE HEREBY AUTHORIZE AND REQUEST** the Commissioner of Patents and Trademarks to issue the Letters Patent to said assignee, its successors and assigns, pursuant to the terms of this Assignment.

IN WITNESS WHEREOF, I have signed, sealed and delivered this instrument this 16<sup>th</sup> day of December, 2002.

  
 \_\_\_\_\_  
 Thomas Neil Horsky

STATE OF MASSACHUSETTS    )  
   ) ss:  
 COUNTY OF MIDDLESEX        )




**BE IT REMEMBERED** that on this \_\_\_\_\_ day of \_\_\_\_\_, 2002, before me, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, came **Thomas Neil Horsky** who is personally known to me to be the identical person described in and who executed and signed the foregoing instrument of writing, and duly acknowledged that he executed the same as his free act and deed, for the purposes and considerations therein expressed.

**IN WITNESS WHEREOF**, I hereunto set my hand and affix my official seal the day and year aforesaid.

Notary Public

My Commission Expires:


IN WITNESS WHEREOF, I have signed, sealed and delivered this instrument this 19th day of December, 2002.

002.   
John Noel Williams

STATE OF MASSACHUSETTS )  
 )  
COUNTY OF SUFFOLK )

**BE IT REMEMBERED** that on this 9<sup>th</sup> day of December, 2002, before me, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, came **John Noel Williams** who is personally known to me to be the identical person described in and who executed and signed the foregoing instrument of writing, and duly acknowledged that he executed the same as his free act and deed, for the purposes and considerations therein expressed.

IN WITNESS WHEREOF, I hereunto set my hand and affix my official seal the day and year aforesaid.

  
Notary Public

My Commission Expires: June 5, 2003