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ΞT

PATEN	TS ONLY
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1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Thomas N. Horsky Dale C. Jacobson	Name: SemEquip, Inc.
Date C. Vaccobsoff	Internal Address:
Additional annual (see Additional (see Additiona) (see Additional (see Additional (see Additional (see Additio	
Additional name(s) of conveying party(ies) attached? Yes . Y	Street Address: 34 Sullivan Road, Unit #21
Execution Date(s) December 16, 2002	Street Address. 34 Suilivan Road, Onit #21
✓ Assignment Merger	
Security Agreement Change of Name	City: Billerica
Joint Research Agreement	State: Massachusetts
Government Interest Assignment	Country 110 A
Executive Order 9424, Confirmatory License	Country: U.S.A. Zip: 01862
Other	Additional name(s) & address(es) attached? Yes
A. Patent Application No.(s)	s document is being filed together with a new applicati B. Patent No.(s)
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Additional numbers 5. Name and address to whom correspondence	6. Total number of applications and patents involved:
Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: John S. Paniaguas	6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00
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5. Name and address to whom correspondence concerning document should be mailed: Name: John S. Paniaguas Internal Address: Street Address: 525 West Monroe Street	6. Total number of applications and patents involved: 7. 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
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5. Name and address to whom correspondence concerning document should be mailed: Name: John S. Paniaguas Internal Address: Street Address: 525 West Monroe Street City: Chicago	6. Total number of applications and patents involved: 7. 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 to the second of the s
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Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: John S. Paniaguas Internal Address: Street Address: 525 West Monroe Street City: Chicago State: Illinois Zip:60661 Phone Number: 312-902-5200	6. Total number of applications and patents involved: 7. 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 to the second of the se
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Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

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 Dale Conrad Jacobson residing at 107 Catswamp Road, Hackettstown, New Jersey 07840, County of Warren and Wade Allen Krull residing at 8 Smith Street, Marblehead, Massachusetts 01915, County of Essex 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 set forth in an application for a patent filed September 20, 2002 and assigned Application No. 10/251,491, entitled Method of Manufacturing CMOS Devices by the Implantation of N- and P-Type Cluster Ions, as well as the following U.S. provisional patent applications upon which the international application claims priority: Serial No. 60/391,847, filed June 26, 2002, and Serial No. 60/392,271, filed June 26, 2002; and U.S. patent application Serial No. 10/244,617, filed September 16, 2002 and all the 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 day of _______, 2002.

Thomas Neil Horsky

Doc #:CHI01 (211843-00024) 50078751v1;11/25/2002/Time:11:01

PATENT REEL: 018751 FRAME: 0585

STATE OF MASSACHUSETTS)	
COUNTY OF MIDDLESEX) ss:)	
Notary Public, duly commissioned, aforesaid, came Thomas Neil Hors described in and who executed and	at on this day of 2002, before me, a qualified and acting in and for the County and State ky who is personally known to me to be the identical person signed the foregoing instrument of writing, and duly same as his free act and deed, for the purposes and	
	F, I hereunto set my hand and affix my official seal the day	
and year aforesaid.	Notary Public Putter Plans	
My Commission Expires:	_	
IN WITNESS WHEREOF day of December	, I have signed, sealed and delivered this instrument this, 2002.	
	Dale Cache	
MSSACHUSEHS STATE OF NEW JERSEY HOLLES EX COUNTY OF WARREN	Dale Conrad Jacobson) ss:)	
BE IT REMEMBERED that on this Lot day of Drewll, 2002, before me, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, came Dale Conrad Jacobson 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 and year aforesaid.	T, I hereunto set my hand and affix my official seal the day Notary Public Notary Public	
My Commission Expires:	_	

PATENT REEL: 018751 FRAME: 0586

IN WITNESS WHEREOF	, I have signed, sealed and delivered this instrument this, 2002.
	Wnew Hlen Kull
	Wade Allen Krull
STATE OF MASSACHUSETTS)) ss:
COUNTY OF ESSEX)	
Notary Public, duly commissioned, aforesaid, came Wade Allen Krull described in and who executed and	at on this day of day of 2002, before me, a qualified and acting in and for the County and State who is personally known to me to be the identical person signed the foregoing instrument of writing, and duly same as his free act and deed, for the purposes and
IN WITNESS WHEREOI and year aforesaid.	F, I hereunto set my hand and affix my official seal the day Notary/Public
My Commission Expires:	
JOANNE ROBERTS Notary Public Commonwealth of Massachusetts My Commission Expires March 13, 2009	

Doc #:CHI01 (211843-00024) 50078751v1;11/25/2002/Time:11:01

RECORDED: 12/29/2006

PATENT REEL: 018751 FRAME: 0587