Form PTO-1595 OF RECERDATION DO 1 - 29 - 2008	
(Rev. 10/02)	103478346 .S. Patent and Trademark Office
Attorney Docket : 033082 M 486DES	
 Name of conveying party(ies): Mitsuhiro OKADA Additional name of conveying party(ies) attached? ☐ Yes ⊠ No 	2. Name and address of receiving party(ies) Name: TOKYO ELECTRON LIMITED
1-23.08	Street Address: 3-6, Akasaka 5-Chome, Minato-Ku, Tokyo 107-8481, Japan
3. Nature of conveyance:	
 Security Agreement Change of Name Other Execution Date: November 6, 2007 	Additional Name(s) & address(es) attached? 🗌 Yes 🔯 No
 4. Application number(s) or patent number(s): A. Patent Application No.(s) 29/290,252 	This document is being filed together with a new application. B. Patent No.(s)
Additional numbers at 5. Name and address of party to whom correspondence	tached? ☐ Yes ⊠ No 6. Total number of applications and patents involved: -1 -
concerning this document should be mailed:	
Name <u>: Michael A. Makuch</u>	7. Total fee (37 CFR 3.41) \$40.00
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Name <u>: Michael A. Makuch</u> Internal Address <u>: SMITH, GAMBRELL & RUSSELL, LLP</u>	 Enclosed Authorized to be charged to deposit account 8. Deposit account number:
Name: Michael A. Makuch Internal Address: SMITH, GAMBRELL & RUSSELL, LLP Street Address: 1130 Connecticut Avenue - Suite 1130 City: Washington State: DC Zip: 20036 DO NOT US	 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 02-4300
Name: Michael A. Makuch Internal Address: SMITH, GAMBRELL & RUSSELL, LLP	 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 02-4300 (Attach duplicate copy of this page if paying by deposit account)
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PATENT REEL: 020443 FRAME: 0404

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ASSIGNMENT

This assignment agreement is applicable to an invention entitled:

GAS SUPPLY PIPE FOR MANUFACTURING SEMICONDUCTOR WAFERS

The PATENT RIGHTS referred to in this agreement are:

(check one) a patent application for this invention, executed by the ASSIGNOR(S) concurrently with this assignment.

U.S. patent application Serial No.______filed _____

____· a U.S. patent application based on PCT International Application No. filed 0 _____, U.S. patent application Serial No._____, if known). on ____

U.S. patent No._____, issued _____. 1

The PATENT RIGHTS also include all divisions, reissues, continuations and extensions of the patents and patent applications identified above.

The PATENT RIGHTS assigned under this agreement are:

(check one)

U.S. patent rights only.

()Worldwide patent rights. In this case, the assignee shall have the right to claim the benefit of the filing date of any U.S. or foreign patent application for this invention.

The ASSIGNOR(S) referred to in this agreement is (or are) the inventor(s) whose signatures appear on page 2 of this Assignment and any Supplemental Sheet(s).

The ASSIGNEES referred to in this agreement are:

(Name of Assignce) **Tokyo Electron Limited** (Address) 3-6, Akasaka 5-Chome Minato-Ku, Tokyo 107-8481 JAPAN

The ASSIGNEE is:

.

□ A Partnership.

■ A Corporation of <u>JAPAN</u> (specify state or country)

(other)

The ASSIGNOR(S), receipt of which is acknowledged, hereby assign(s) the following rights to the ASSIGNEES, their successors and assigns:

> PATENT REEL: 020443 FRAME: 0405

THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO TOKYO ELECTRON LIMITED

the full and exclusive right to the invention;

the entire right, title and interest in and to the PATENT RIGHTS;

the right to sue and recover for any past infringement; and,

the right to claim priority under 35 USC 119, 35 USC 120, or any other applicable provisions, based on any earlier patent applications for this invention.

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue all Letters Patent to the ASSIGNEES as the assignce of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEES, their successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEES, or their representatives, any facts known to the ASSIGNOR(S) respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEES, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEES, their successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNORS authorize any attorneys and agents who have a power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

Mitsuhiro OKADA Millsuhiro Prada Name of sole or first inventor Signature

1Vov 6, 200 ^{rr} Date