| Form PTO-1595 (Rev. 03-05) | | |
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| OMB No. 0651-0027 (exp. 6/30/2005) | | |

09-25-2006

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| Hung-Tai TSAO (8/23/2006) | Internal Address: |
| Additional name(s) of conveying party(ies) attached? Yes X No | Street Address: |
| 3. Nature of conveyance/Execution Date(s): | |
| Execution Date(s): in parentheses after inventor name | No. 8, Li-Hsin Rd. 6 Science-Based Industrial Park |
| X Assignment Merger Change of Name | |
| Security Agreement Joint Research Agreement | City: Hsin-Chu |
| Government Interest Assignment | State: |
| Executive Order 9424, Confirmatory License | Country: Taiwan ROC Zip: 300-77 |
| Other | Additional name(s) & address(es) Yes X No |
| | attached: |
| 4. Application or patent number(s): A. Patent Application No.(s) | This document is being filed together with a new application. B. Patent No.(s) |
| NEW | ,, |
| | |
| Additional numbers attached? | Yes X No |
| | |
| Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: |
| Name and address to whom correspondence concerning document should be mailed: Name: Joe McKinney Muncy | 6. Total number of applications and |
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| 5. Name and address to whom correspondence concerning document should be mailed: Name: Joe McKinney Muncy BIRCH, STEWART, KOLASCH & BIRCH, LLP Internal Address: Atty. Dkt.: 0941-1740PUS1 | 6. Total number of applications and patents involved: |
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ASSIGNMENT

WHEREAS, Chun-Jen HSIEH, Chi-Kang PENG, Wen-Hao YANG and Barry TSAO hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as described and set forth in the below identified application for United States Letters Patent:

| Title:_ | METHOD | AND APPARATU | S FOR | CLEANING SPIN | COATER | |
|---------|--------|-----------------|--------|---------------|--------|--|
| Filed: | | September 19 | , 2006 | Serial N | o. NEW | |
| Execut | ed on: | August 23, 2006 | | | | |

WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. of No. 8, Li-Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, 6, R.O.C. hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

TSMC2006-0285/0503-A32272US

PATENT REEL: 018316 FRAME: 0542

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| Chun-Jen HSIEH | 8/23'26 |
|-------------------------------|----------------------|
| Chun-Jen HSIEH" | Date: |
| Pey di Cony Chil-Kang PENG | Date: |
| Wan-Hao YANG | Ø1},∞6 Date: |
| TSAO HUNG TOT | 8/23 / 2006 Date: |

IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the datc(s) indicated.

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PATENT REEL: 018316 FRAME: 0543

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RECORDED: 09/19/2006