PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Boon Meng Seah | 10/13/2006 |
| Bei Chao Zhang | 10/12/2006 |
| Raymond Joy | 10/16/2006 |
| Shao Beng Law | 10/15/2006 |
| John Sudijono | 10/20/2006 |
| Liang Choo Hsia | 10/26/2006 |

RECEIVING PARTY DATA

| Name: | Chartered Semiconductor Manufacturing LTD | |
|-------------------|---|--|
| Street Address: | 60 Woodlands Industrial Park D, Street Two, | |
| Internal Address: | Chartered Semi - Legal Department | |
| City: | Singapore | |
| State/Country: | SINGAPORE | |
| Postal Code: | 738406 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11556696 |

CORRESPONDENCE DATA

Fax Number: (267)200-0730

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (215) 670-2455

Email: wspatent-uspto@yahoo.com

Correspondent Name: William J Stoffel

Address Line 1: 1735 Market Street - Ste A455

Address Line 4: Philadelphia, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER: CS04-111

PATENT REEL: 018481 FRAME: 0418

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| NAME OF SUBMITTER: | William J. Stoffel |
|--|---------------------|
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PATENT REEL: 018481 FRAME: 0419

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| ASSIGNMENT OF RIGHTS, TITLE AND INTEREST IN INVENTION | Page 1 |
|---|---------------------------------|
| (Multiple inventors; single assignee (Chartered Semi) Docket: CS04-111 | |
| This is an Assignment of the following rights, title and interest: (check all that | арріу): |
| [X] United States of America rights, title and interest in the invention [X] Foreign rights, title and interest in the invention [X] United States Patent Application Serial No. application attached Date of Execution: Date of Filing: \(\frac{1\text{1\subset}}{\subset \subseteq} \) Date of Filing: \(\frac{1\text{1\subseteq}}{\subseteq} \) United States Provisional Patent Application Serial No. United States Patent No (s). International (PCT) Patent Application Serial No. Other (specify) Other (specify) | SN 11/556, 696 COLF#9168 WJS |
| Title of the Invention: Apparatus and methods for Cleaning and Dry | ving of wafers |
| INVENTORS (ASSIGNORS) PLEASE PRINT in CAI | PITAL LETTERS |
| 1) Boon Meng <u>Seah</u> | |
| residence Address: Blk 340A Sembawang Close #09-93 Singapore 75134 | 0 SG |
| 2) Bei Chao <u>Zhang</u> | |
| residence Address Blk 703 Choa Chu Kang St 53 #10-60, Singapore 68070 | 03 SG |
| 3) Raymond <u>Joy</u> | |
| residence Address: Blk 135 Bishan Street 12 #07-406 Singapore 570135 SG | 3 |
| 4) Shao Beng <u>Law</u> | |
| residence Address: BLK 66, Marine Drive, #03-182, Singapore SG (44006 | 66) |

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5) John Sudijono

6) Liang Choo Hsia

residence Addr: 90 Hillview Ave #05-06 Singapore 669610 SG

Residence Address: 22 Woodgrove Avenue Singapore 738064 SG

PATENT REEL: 018481 FRAME: 0420

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| ASSIGNMENT OF RIGHTS, TITLE AND INTEREST IN INVENTION | Page 2 |
|---|--------|
| (Multiple inventors; single assignee (Chartered Semi) | |
| Docket : CS04-111 | |

ASSIGNEE

Name: Chartered Semiconductor Manufacturing, Ltd.

Address: 60 Woodlands Industrial Park D, Street Two, Singapore SG 738406

Whereas, we, the above-identified Inventors, have invented certain new and useful improvements in the Invention identified above and described in the above-identified patent application(s) and/or patent(s) (hereinafter referred to as "Invention");

And, whereas we desire to assign our above-identified rights, title and interest in the Invention to the above-identified Assignee;

Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, sell and transfer our above-identified rights, title and interest in said Invention, said application(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, unto said Assignee;

And we hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications for foreign patents, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid Invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

The undersigned hereby grant(s) the firm of Stoffel Law office, and William Stoffel, of 1735 Market St – Ste A455, Philadelphia, PA, 19103 USA, the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Inventor - please fill in all requested information below

INVENTORS' NAME - SIGNATURE - DATE

| | Name: PRINT (first, middle, family) | SIGNATURE (sign) | DATE |
|------------|-------------------------------------|------------------|----------|
| INVENTOR 1 | Boon Meng <u>Seah</u> | SIGNATURE sign) | DATE |
| INVENTOR 2 | Bei Chao <u>Zhang</u> | BCZes | 12/10/06 |
| INVENTOR 3 | Raymond Joy | RD | 12/10/06 |
| INVENTOR 4 | Shao Beng <u>Law</u> | h, MM | 15/10/06 |
| INVENTOR 5 | John <u>Sudijono</u> | | |
| INVENTOR 6 | Liang Choo <u>Hsia</u> | Li Osto | 26-oct-0 |

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PATENT REEL: 018481 FRAME: 0421

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| ASSIGNMENT OF RIGHTS, TITLE AND INTEREST IN INVENTION | Page 2 |
|---|--------|
| (Multiple inventors; single assignee (Chartered Semi) | |
| Docket : CS04-111 | |

ASSIGNEE

Name: Chartered Semiconductor Manufacturing, Ltd.

Address: 60 Woodlands Industrial Park D, Street Two, Singapore SG 738406

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Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, self and transfer our above-identified rights, title and interest in said Invention, said application(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may he granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, unto said Assignee;

And we hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications for foreign patents, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

The undersigned hereby grant(s) the firm of Stoffel Law office, and William Stoffel, of 1735 Market St – Ste A455, Philadelphia, PA, 19103 USA, the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Inventor - please fill in all requested information below

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| | Name: PRINT (first, middle, family) | SIGNATURE (sign) | DATE |
|------------|--|------------------|----------|
| INVENTOR 1 | Boon Meng <u>Seah</u> | SIGNATURE (sign) | DATE |
| INVENTOR 2 | Bei Chao <u>Zhang</u> | | |
| INVENTOR 3 | Raymond <u>Joy</u> | | |
| INVENTOR 4 | Shao Beng <u>Law</u> | | |
| INVENTOR 5 | John <u>Sudijono</u> | 7 Perlos | 10/20/06 |
| INVENTOR 6 | Liang Choo <u>Hsia</u> | · · | |

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PATENT REEL: 018481 FRAME: 0422

RECORDED: 11/05/2006