502135552 11/20/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Naoto Yamade | 11/13/2012 |
| Junichi Koezuka | 11/12/2012 |
| Miki Suzuki | 11/13/2012 |
| Yuichi Sato | 11/13/2012 |

RECEIVING PARTY DATA

| Name: | Semiconductor Energy Laboratory Co., Ltd. | |
|-----------------|---|--|
| Street Address: | 398, Hase | |
| City: | Atsugi-shi, Kanagawa-ken | |
| State/Country: | JAPAN | |
| Postal Code: | 243-0036 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 13681888 | |

CORRESPONDENCE DATA

Fax Number: 7037662394

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

Phone: (571) 434-6789
Email: uspto@riplo.com
Correspondent Name: Eric J. Robinson

Address Line 1: Robinson IP Law Office, P.C.
Address Line 2: 3975 Fair Ridge Drive, Suite 20 North

Address Line 4: Fairfax, VIRGINIA 22033

| ATTORNEY DOCKET NUMBER: | 0756-9983 |
|-------------------------|------------------|
| NAME OF SUBMITTER: | Eric J. Robinson |

Total Attachments: 4

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif

> PATENT REEL: 029330 FRAME: 0280

OF \$40.00 15681888

ASSIGNMENT

Serial No. _ 13/681,888

Filed November 20, 2012

WHEREAS, Naoto YAMADE, Junichi KOEZUKA, Miki SUZUKI and Yuichi SATO (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE for which an application for Letters Patent of the United States of America has been executed by the undersigned on , and;

WHEREAS, <u>Semiconductor Energy Laboratory Co.</u>, <u>Ltd.</u> of <u>398</u>, <u>Hase</u>, <u>Atsugi-shi</u>, <u>Kanagawa-ken</u>, <u>243-0036 Japan</u> and its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories and for all foreign countries, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or any continuation, division or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims under or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to

the said Assignee, as Assignee of the entire interest, and hereby convenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of ROBINSON INTELLECTUAL PROPERTY LAW OFFICE the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

In witness thereof, this Assignment has been executed by the undersigned on the date(s) opposite the undersigned name(s).

| Date | Signature Na ot o YAMADE |
|----------------------------|---|
| | Name Naoto YAMADE |
| Date | Signature |
| | Name Junichi KOEZUKA |
| Date 11/13/2012 | Signature Miki SUZUKI |
| | Name Miki SUZUKI |
| Date 11 / 13 / 2012 | Signature Ywichi SATO Name Yuichi SATO |
| | Name Tukin SATO |
| Notary Public. If not, the | uld preferably be acknowledged before a United States Consul on the execution by the Inventor(s) should be witnessed has (have) useful improvements in by at least two other persons who should |
| Witness | Signature |
| Witness_ | Signature |
| Witness | Signature |

ASSIGNMENT

Serial No. _ 13/681,888

Filed November 20, 2012

WHEREAS, Naoto YAMADE, Junichi KOEZUKA, Miki SUZUKI and Yuichi SATO (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE for which an application for Letters Patent of the United States of America has been executed by the undersigned on , and;

WHEREAS, <u>Semiconductor Energy Laboratory Co., Ltd.</u> of <u>398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan</u> and its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories and for all foreign countries, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or any continuation, division or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims under or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to

the said Assignee, as Assignee of the entire interest, and hereby convenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of ROBINSON INTELLECTUAL PROPERTY LAW OFFICE the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

In witness thereof, this Assignment has been executed by the undersigned on the date(s) opposite the undersigned name(s).

| Date | Signature | | |
|----------------------------|------------|---|--|
| | Name | Naoto YAMADE | |
| Date 1/(2/2012 | Signatu | re Junichi KUEZUKA | |
| | Name | Junichi KOEZUKA | |
| Date | Signatur | re | |
| | Name | reMiki SUZUKI | |
| Date | Signatur | TC | |
| | Name | Yuichi SATO | |
| Notary Public. If not, the | n the exec | ably be acknowledged before a United States Consul or cution by the Inventor(s) should be witnessed has (have) provements in by at least two other persons who should | |
| Witness | - | Signature | |
| Witness | | Signature | |
| Witness | | Signature | |