

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                                                                                                                                                        | NEW ASSIGNMENT                            |               |                                           |                     |            |                  |                          |                |            |                  |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------|-------------------------------------------|---------------------|------------|------------------|--------------------------|----------------|------------|------------------|------------|
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                                                                                                                                                   | ASSIGNMENT                                |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Shunpei Yamazaki</td> <td>09/09/2009</td> </tr> <tr> <td>Hidekazu Miyairi</td> <td>09/09/2009</td> </tr> <tr> <td>Kengo Akimoto</td> <td>09/09/2009</td> </tr> <tr> <td>Kojiro Shiraishi</td> <td>09/10/2009</td> </tr> </tbody> </table> |                                           | Name          | Execution Date                            | Shunpei Yamazaki    | 09/09/2009 | Hidekazu Miyairi | 09/09/2009               | Kengo Akimoto  | 09/09/2009 | Kojiro Shiraishi | 09/10/2009 |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                    | Execution Date                            |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Shunpei Yamazaki                                                                                                                                                                                                                                                                                                                                                                                                                        | 09/09/2009                                |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Hidekazu Miyairi                                                                                                                                                                                                                                                                                                                                                                                                                        | 09/09/2009                                |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Kengo Akimoto                                                                                                                                                                                                                                                                                                                                                                                                                           | 09/09/2009                                |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Kojiro Shiraishi                                                                                                                                                                                                                                                                                                                                                                                                                        | 09/10/2009                                |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Semiconductor Energy Laboratory Co., Ltd.</td> </tr> <tr> <td>Street Address:</td> <td>398, Hase</td> </tr> <tr> <td>City:</td> <td>Atsugi-shi, Kanagawa-ken</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> <tr> <td>Postal Code:</td> <td>243-0036</td> </tr> </table>                                    |                                           | Name:         | Semiconductor Energy Laboratory Co., Ltd. | Street Address:     | 398, Hase  | City:            | Atsugi-shi, Kanagawa-ken | State/Country: | JAPAN      | Postal Code:     | 243-0036   |
| Name:                                                                                                                                                                                                                                                                                                                                                                                                                                   | Semiconductor Energy Laboratory Co., Ltd. |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Street Address:                                                                                                                                                                                                                                                                                                                                                                                                                         | 398, Hase                                 |               |                                           |                     |            |                  |                          |                |            |                  |            |
| City:                                                                                                                                                                                                                                                                                                                                                                                                                                   | Atsugi-shi, Kanagawa-ken                  |               |                                           |                     |            |                  |                          |                |            |                  |            |
| State/Country:                                                                                                                                                                                                                                                                                                                                                                                                                          | JAPAN                                     |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Postal Code:                                                                                                                                                                                                                                                                                                                                                                                                                            | 243-0036                                  |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12511285</td> </tr> </tbody> </table>                                                                                                                                                                       |                                           | Property Type | Number                                    | Application Number: | 12511285   |                  |                          |                |            |                  |            |
| Property Type                                                                                                                                                                                                                                                                                                                                                                                                                           | Number                                    |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Application Number:                                                                                                                                                                                                                                                                                                                                                                                                                     | 12511285                                  |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |
| <p>Fax Number: (571)434-9499<br/> <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: (571) 434-6789<br/>       Email: astamper@riplo.com<br/>       Correspondent Name: Eric J. Robinson<br/>       Address Line 1: Robinson IP Law Office, P.C.<br/>       Address Line 2: 21010 South Street, PMB 955<br/>       Address Line 4: Potomac Falls, VIRGINIA 20165</p>                    |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |
| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                                                                                                                                                 | 0756-8587                                 |               |                                           |                     |            |                  |                          |                |            |                  |            |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                                                                                                                                                      | Eric J. Robinson                          |               |                                           |                     |            |                  |                          |                |            |                  |            |
| Total Attachments: 2                                                                                                                                                                                                                                                                                                                                                                                                                    |                                           |               |                                           |                     |            |                  |                          |                |            |                  |            |

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**PATENT**  
**REEL: 023362 FRAME: 0891**

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**ASSIGNMENT**

Serial No. 12/511,285

Filed July 29, 2009

WHEREAS, Shunpei YAMAZAKI, Hidekazu MIYAIRI, Kengo AKIMOTO and Kojiro SHIRAISHI

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME for which an application for Letters Patent of the United States of America has been executed by the undersigned on \_\_\_\_\_, and;

WHEREAS, Semiconductor Energy Laboratory Co., Ltd. of 398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan 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.

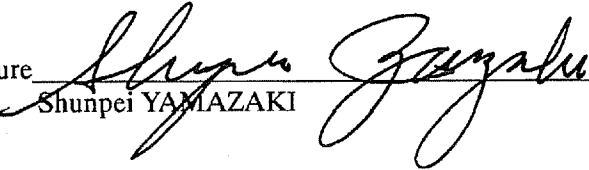
The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment 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 covenants 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 09/09/2009 Signature   
Name Shunpei YAMAZAKI

Date 09/09/2009 Signature Hidekazu MIYAIRI  
Name Hidekazu MIYAIRI

Date 09/09/2009 Signature Kengo AKIMOTO  
Name Kengo AKIMOTO

Date 09/10/2009 Signature Kojiro SHIRAISHI  
Name Kojiro SHIRAISHI

This assignment should preferably be acknowledged before a United States Consul or Notary Public. If not, then the execution by the Inventor(s) should be witnessed has (have) invented certain new and useful improvements in by at least two other persons who should sign here.

Witness \_\_\_\_\_ Signature \_\_\_\_\_

Witness \_\_\_\_\_ Signature \_\_\_\_\_

Witness \_\_\_\_\_ Signature \_\_\_\_\_