

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT2628996

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Junichi Koezuka</td> <td>11/14/2013</td> </tr> <tr> <td>Yukinori Shima</td> <td>11/14/2013</td> </tr> <tr> <td>Hajime Tokunaga</td> <td>11/14/2013</td> </tr> <tr> <td>Keisuke Murayama</td> <td>11/10/2013</td> </tr> <tr> <td>Daisuke Matsubayashi</td> <td>11/13/2013</td> </tr> </tbody> </table>		Name	Execution Date	Junichi Koezuka	11/14/2013	Yukinori Shima	11/14/2013	Hajime Tokunaga	11/14/2013	Keisuke Murayama	11/10/2013	Daisuke Matsubayashi	11/13/2013
Name	Execution Date												
Junichi Koezuka	11/14/2013												
Yukinori Shima	11/14/2013												
Hajime Tokunaga	11/14/2013												
Keisuke Murayama	11/10/2013												
Daisuke Matsubayashi	11/13/2013												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>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												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14061510</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	14061510								
Property Type	Number												
Application Number:	14061510												
CORRESPONDENCE DATA													
Fax Number:	(877)769-7945												
Phone:	(202) 783-5070												
Email:	apsi@fr.com												
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>													
Correspondent Name:	JOHN F. HAYDEN												
Address Line 1:	FISH & RICHARDSON P.C.												
Address Line 2:	P.O.BOX 1022												
Address Line 4:	MINNEAPOLIS, MINNESOTA 55440-1022												
ATTORNEY DOCKET NUMBER:	12732-1252001												
NAME OF SUBMITTER:	APRIL K. SAUNDERS-FULLER												

CH \$40.00 14061510

Signature:	/April K. Saunders-Fuller/
Date:	11/26/2013
<b>Total Attachments: 6</b> source=12732-1252001-ASN#page1.tif source=12732-1252001-ASN#page2.tif source=12732-1252001-ASN#page3.tif source=12732-1252001-ASN#page4.tif source=12732-1252001-ASN#page5.tif source=12732-1252001-ASN#page6.tif	

## ASSIGNMENT

For valuable consideration, We, Junichi KOEZUKA of Tochigi, Tochigi, Japan, Yukinori SHIMA of Tatebayashi, Gunma, Japan, Hajime TOKUNAGA of Gureisuwadamachi505, 3-9-6, Hoshikawa, Hodogaya-ku, Yokohama-shi, Kanagawa-ken, 240-0006, Japan, Toshinari SASAKI of C/O Tomita, 5-8-15-405, Kitashinagawa, Shinagawa-ku, Tokyo-to, 141-0001, Japan, Keisuke MURAYAMA of GurankasaH103, 7-3-46, Kagawa, Chigasaki-shi, Kanagawa-ken, 253-0082, Japan and Daisuke MATSUBAYASHI of Atsugi, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese corporation having a place of business at:

398. Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME, filed October 23, 2013, and assigned U.S. Serial Number 14/061,510, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Signature Junichi KOEZUKA  
Name: Junichi KOEZUKA  
Date: 11/14/2013

Signature Yukinori Shima  
Name: Yukinori SHIMA  
Date: 11/14/2013

Signature \_\_\_\_\_  
Name: Hajime TOKUNAGA  
Date: \_\_\_\_\_

Signature Toshinari Sasaki  
Name: Toshinari SASAKI  
Date: 11/10/2013

Signature \_\_\_\_\_  
Name: Keisuke MURAYAMA  
Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: Daisuke MATSUBAYASHI  
Date: \_\_\_\_\_

## ASSIGNMENT

For valuable consideration, We, Junichi KOEZUKA of Tochigi, Tochigi, Japan, Yukinori SHIMA of Tatebayashi, Gunma, Japan, Hajime TOKUNAGA of Gureisuwadamachi505, 3-9-6, Hoshikawa, Hodogaya-ku, Yokohama-shi, Kanagawa-ken, 240-0006, Japan, Toshinari SASAKI of C/O Tomita, 5-8-15-405, Kitashinagawa, Shinagawa-ku, Tokyo-to, 141-0001, Japan, Keisuke MURAYAMA of Gurankasa1103, 7-3-46, Kagawa, Chigasaki-shi, Kanagawa-ken, 253-0082, Japan and Daisuke MATSUBAYASHI of Atsugi, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese corporation having a place of business at:

398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME, filed October 23, 2013, and assigned U.S. Serial Number 14/061,510, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Signature \_\_\_\_\_

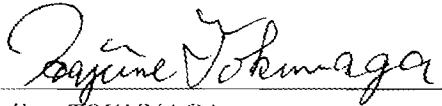
Name: Junichi KOEZUKA

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Name: Yukinori SHIMA

Date: \_\_\_\_\_

Signature   
Name: Hajime TOKUNAGA  
Date: 11/14 / 2013

Signature \_\_\_\_\_  
Name: Toshinari SASAKI  
Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: Keisuke MURAYAMA  
Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: Daisuke MATSUBAYASHI  
Date: \_\_\_\_\_

## ASSIGNMENT

For valuable consideration. We, Junichi KOEZUKA of Tochigi, Tochigi, Japan, Yukinori SHIMA of Tatebayashi, Gunma, Japan, Hajime TOKUNAGA of Gureisuwadamachi505, 3-9-6, Hoshikawa, Hodogaya-ku, Yokohama-shi, Kanagawa-ken, 240-0006, Japan, Toshinari SASAKI of C/O Tomita, 5-8-15-405, Kitashinagawa, Shinagawa-ku, Tokyo-to, 141-0001, Japan, Keisuke MURAYAMA of Gurankasall103, 7-3-46, Kagawa, Chigasaki-shi, Kanagawa-ken, 253-0082, Japan and Daisuke MATSUBAYASHI of Atsugi, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese corporation having a place of business at:

398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME, filed October 23, 2013, and assigned U.S. Serial Number 14/061,510, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known: this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Signature \_\_\_\_\_

Name: Junichi KOEZUKA

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Name: Yukinori SHIMA

Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: Hajime TOKUNAGA  
Date: \_\_\_\_\_

Signature \_\_\_\_\_  
Name: Toshinari SASAKI  
Date: \_\_\_\_\_

Signature 11/10/2013  
Name: Keisuke MURAYAMA  
Date: Keisuke Murayama

Signature Daisuke Matsubayashi  
Name: Daisuke MATSUBAYASHI  
Date: 11/13/2013