

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TARO NISHIGUCHI	10/02/2012
SHIN HARADA	10/10/2012
SHINSUKE FUJIWARA	10/04/2012
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<b>Name:</b>	SUMITOMO ELECTRIC INDUSTRIES, LTD.
<b>Street Address:</b>	5-33, KITAHAMA 4-CHOME, CHUO-KU
<b>City:</b>	OSAKA-SHI, OSAKA
<b>State/Country:</b>	JAPAN
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14535642
<b>CORRESPONDENCE DATA</b>	
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<b>NAME OF SUBMITTER:</b>	PAUL A. FOURNIER
<b>SIGNATURE:</b>	/Paul A. Fournier/
<b>DATE SIGNED:</b>	11/07/2014
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 3</b>	
source=201917_0124_01_518851_declaration_assignment#page1.tif	
source=201917_0124_01_518851_declaration_assignment#page2.tif	
source=201917_0124_01_518851_declaration_assignment#page3.tif	

ATTORNEY DOCKET NO.:  
SOLE/JOINT INVENTION  
(U.S. Rights Only)

## COMBINED DECLARATION AND ASSIGNMENT

WHEREAS I/WE, the below-named inventor(s) – hereinafter referred to as Assignor(s) – have made an invention entitled:

**Semiconductor Substrate**

for which I/WE are filing an application for United States Letters Patent, the application being the one identified in the Declaration set forth below; and

WHEREAS, Sumitomo Electric Industries, Ltd., a corporation of Japan, whose post office address is 5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041 Japan, (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to issue upon this application or any United States patent application claiming priority based on this application;

NOW THEREFORE, be it known that, for good and valuable consideration, the receipt of which from Assignee is hereby acknowledged, I/WE, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, including any provisional applications identified in this application, and all divisionals, continuations, and continuations-in-part thereof, and any United States patent application claiming priority based on this application, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, including the right to claim priority from any earlier application or patent priority from which is asserted in or in connection with this application, said invention, each said application, and each said Letters Patent to be held and enjoyed by the Assignee, for Assignee's own use and benefit, and for Assignee's legal representatives and assigns to the full end of the term or terms for which each said Letters Patent may be granted, as fully and entirely as the same would have been held by the Assignor(s) had this Assignment not been made; and I/WE hereby authorize and request the United States Patent and Trademark Office to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, continuation-in-part, and reissue applications, and any other application claiming priority based on this application, make all rightful oaths or the like, and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Power of Attorney in this application, to insert here in parentheses (Application No. \_\_, filed \_\_) the filing date and application number of said application when known.

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AS A DECLARATION UNDER 37 CFR 1.63, for a utility or design application using an Application Data Sheet (37 CFR 1.76), each below-named inventor for which a signature has been provided hereby declares that:

This Declaration is directed to:

- The attached application, or
- United States application or PCT international application number \_\_\_\_\_ filed  
on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this Declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form.

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IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

<b>Legal Name of Sole/First Assignor/Inventor</b> Taro NISHIGUCHI	Assignor/Inventor Signature <i>Taro Nishiguchi</i>	Date October 2, 2012
<b>Legal Name of Second Assignor/Inventor</b> Shin HARADA	Assignor/Inventor Signature <i>Shin Harada</i>	Date October 10, 2012
<b>Legal Name of Third Assignor/Inventor</b> Shinsuke FUJIWARA	Assignor/Inventor Signature <i>Shinsuke Fujiwara</i>	Date October 4, 2012
<b>Legal Name of Fourth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Fifth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Sixth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Seventh Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Eighth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Ninth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Tenth Assignor/Inventor</b>	Assignor/Inventor Signature	Date
<b>Legal Name of Eleventh Assignor/Inventor</b>	Assignor/Inventor Signature	Date

Name(s) of additional Assignor(s)/Inventor(s) attached:  Yes  No