

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT														
<b>NATURE OF CONVEYANCE:</b>	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>Unryu Ogawa</td><td>10/06/2011</td></tr> <tr><td>Masahisa Okuno</td><td>10/06/2011</td></tr> <tr><td>Tokunobu Akao</td><td>10/06/2011</td></tr> <tr><td>Shinji Yashima</td><td>10/06/2011</td></tr> <tr><td>Atsushi Umekawa</td><td>10/06/2011</td></tr> <tr><td>Kaichiro Minami</td><td>10/06/2011</td></tr> </tbody> </table>		Name	Execution Date	Unryu Ogawa	10/06/2011	Masahisa Okuno	10/06/2011	Tokunobu Akao	10/06/2011	Shinji Yashima	10/06/2011	Atsushi Umekawa	10/06/2011	Kaichiro Minami	10/06/2011
Name	Execution Date														
Unryu Ogawa	10/06/2011														
Masahisa Okuno	10/06/2011														
Tokunobu Akao	10/06/2011														
Shinji Yashima	10/06/2011														
Atsushi Umekawa	10/06/2011														
Kaichiro Minami	10/06/2011														
<b>RECEIVING PARTY DATA</b>															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20%;">Name:</td><td>Hitachi Kokusai Electric Inc.</td></tr> <tr><td>Street Address:</td><td>14-1, Sotokanda 4-chome</td></tr> <tr><td>Internal Address:</td><td>Chiyoda-ku</td></tr> <tr><td>City:</td><td>Tokyo</td></tr> <tr><td>State/Country:</td><td>JAPAN</td></tr> <tr><td>Postal Code:</td><td>1018980</td></tr> </table>		Name:	Hitachi Kokusai Electric Inc.	Street Address:	14-1, Sotokanda 4-chome	Internal Address:	Chiyoda-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	1018980		
Name:	Hitachi Kokusai Electric Inc.														
Street Address:	14-1, Sotokanda 4-chome														
Internal Address:	Chiyoda-ku														
City:	Tokyo														
State/Country:	JAPAN														
Postal Code:	1018980														
<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>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13240545</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13240545										
Property Type	Number														
Application Number:	13240545														
<b>CORRESPONDENCE DATA</b>															
<p>Fax Number: (215)568-6499</p> <p>Phone: 215-568-6400</p> <p>Email: jheuer@vklaw.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Volpe and Koenig, P.C.</p> <p>Address Line 1: 30 S. 17th Street</p> <p>Address Line 2: United Plaza</p> <p>Address Line 4: Philadelphia, PENNSYLVANIA 19103</p>															

CH \$40.00 13240545

501740615

**PATENT**  
**REEL: 027309 FRAME: 0860**

ATTORNEY DOCKET NUMBER:	HITACHI12-21010243US01
NAME OF SUBMITTER:	Daniel N. Calder
Total Attachments: 2 source=21010243US01_Assignment_EFS#page1.tif source=21010243US01_Assignment_EFS#page2.tif	

**ASSIGNMENT**

**Unryu Ogawa, Masahisa Okuno, Tokunobu Akao, Shinji Yashima, Atsushi Umekawa, Kaichiro Minami**, residing at Toyama, Japan, citizens of Japan (hereafter the undersigned); are the inventor of

Substrate Processing Apparatus and Method of Manufacturing Semiconductor Device for which the undersigned executed an application for United States Letters Patent, U.S. Patent Application No. 13/240,545, filed September 22, 2011.

The undersigned hereby authorizes assignee or assignee's representative to insert the Application Number and the filing date of this application if they are unknown at the time of execution of this assignment.

**Hitachi Kokusai Electric Inc.**, [ a / an] company, having a principal place of business at

14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1018980, Japan

(hereafter referred to as the assignee), is desirous of acquiring the entire right, title, and interest in said invention, all applications for, and all letters patent issued on said invention.

For good and valuable consideration, the receipt and sufficiency of which is acknowledged, the undersigned, intending to be legally bound, does hereby sell, assign, and transfer to the assignee and assignee's successors, assigns, and legal representatives the entire right, title, and interest in said invention and all patent applications thereon, including, but not limited to, the application for United States Letters Patent entitled as above, and all divisions and continuations thereof, and in all letters patent, including all reissues and reexaminations thereof, throughout the world, including the right to claim priority under the Paris Convention or other treaty.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention throughout the world for the benefit of the assignee, and to execute all instruments proper to carry out the intent of this instrument.

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this 6<sup>th</sup> day of October, 2011

at Tokyo, Japan.

(Place)

Witness:

\_\_\_\_\_

Unryu Ogawa (L.S.)  
Unryu Ogawa

\_\_\_\_\_

Masahisa Okuno (L.S.)  
Masahisa Okuno

\_\_\_\_\_

Akao Tokunobu (L.S.)  
Tokunobu Akao

\_\_\_\_\_

Shinji Yashima (L.S.)  
Shinji Yashima

\_\_\_\_\_

Atsushi Umekawa (L.S.)  
Atsushi Umekawa

\_\_\_\_\_

Kaichiro Minami (L.S.)  
Kaichiro Minami

(Although not mandatory, if possible,  
please subscribe appropriate notarization and obtain APOSTILLE)