

PATENT ASSIGNMENT

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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>Masayuki HATANO</td> <td>09/18/2012</td> </tr> <tr> <td>Hiroshi TOKUE</td> <td>09/18/2012</td> </tr> </tbody> </table>		Name	Execution Date	Masayuki HATANO	09/18/2012	Hiroshi TOKUE	09/18/2012				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>KABUSHIKI KAISHA TOSHIBA</td> </tr> <tr> <td>Street Address:</td> <td>1-1, Shibaura 1-chome, Minato-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>105-8001</td> </tr> </table>		Name:	KABUSHIKI KAISHA TOSHIBA	Street Address:	1-1, Shibaura 1-chome, Minato-ku	City:	Tokyo	State/Country:	JAPAN	Postal Code:	105-8001
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: 2024084400 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 2024084000 Email: bernie.carson@finnegan.com Correspondent Name: FINNEGAN Address Line 1: 901 NEW YORK AVENUE, NW Address Line 4: WASHINGTON, DC, DISTRICT OF COLUMBIA 20001</p>											
ATTORNEY DOCKET NUMBER:	09814.0157										
NAME OF SUBMITTER:	B.Carson										
<p>Total Attachments: 2 source=ASSIGNMENT#page1.tif source=ASSIGNMENT#page2.tif</p>											

OP \$40.00 13599358

JOINT INVENTION
(U.S. Rights Only)

ASSIGNMENT

WHEREAS, We, the below named inventors, (hereinafter referred to as assignors, have made an invention entitled:

"SEMICONDUCTOR MANUFACTURING APPARATUS AND METHOD FOR
MANUFACTURING SEMICONDUCTOR DEVICE"

for which we executed an application for United States Letters Patent concurrently herewith, or on _____, or filed an application for United States Letters Patent on _____ (Application No. _____); and

WHEREAS, KABUSHIKI KAISHA TOSHIBA, a corporation of Japan, whose post office address is 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, 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 be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to 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, and reissue applications, make all rightful oaths 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, WE HEREBY authorize and request the attorneys we have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. 13/599,358, filed August 30, 2012) the filing date and application number of said application when known.

IN TESTIMONY WHEREOF, we have hereunto set our hands.

First Assignor

Assignor Name: **Masayuki HATANO**

Assignor Address: c/o Intellectual Property Division, Toshiba Corporation,
1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN

Citizenship: Japan

Signature: Masayuki Hatano

Date: Sept. 18, 2012

Second Assignor

Assignor Name: **Hiroshi TOKUE**

Assignor Address: c/o Intellectual Property Division, Toshiba Corporation,
1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN

Citizenship: Japan

Signature: Hiroshi Tokue

Date: Sept. 18, 2012