

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| 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>Makoto WADA</td> <td>03/27/2013</td> </tr> <tr> <td>Yuichi YAMAZAKI</td> <td>03/27/2013</td> </tr> <tr> <td>Akihiro KAJITA</td> <td>03/27/2013</td> </tr> <tr> <td>Atsunobu ISOBAYASHI</td> <td>03/27/2013</td> </tr> <tr> <td>Tatsuro SAITO</td> <td>03/27/2013</td> </tr> </tbody> </table> | | Name | Execution Date | Makoto WADA | 03/27/2013 | Yuichi YAMAZAKI | 03/27/2013 | Akihiro KAJITA | 03/27/2013 | Atsunobu ISOBAYASHI | 03/27/2013 | Tatsuro SAITO | 03/27/2013 |
| Name | Execution Date | | | | | | | | | | | | |
| Makoto WADA | 03/27/2013 | | | | | | | | | | | | |
| Yuichi YAMAZAKI | 03/27/2013 | | | | | | | | | | | | |
| Akihiro KAJITA | 03/27/2013 | | | | | | | | | | | | |
| Atsunobu ISOBAYASHI | 03/27/2013 | | | | | | | | | | | | |
| Tatsuro SAITO | 03/27/2013 | | | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | | | |
| Name: | KABUSHIKI KAISHA TOSHIBA | | | | | | | | | | | | |
| Street Address: | 1-1, Shibaura 1-Chome, | | | | | | | | | | | | |
| Internal Address: | Minato-ku | | | | | | | | | | | | |
| City: | Tokyo | | | | | | | | | | | | |
| State/Country: | JAPAN | | | | | | | | | | | | |
| Postal Code: | 105-8001 | | | | | | | | | | | | |
| 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>13846850</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13846850 | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | |
| Application Number: | 13846850 | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | |
| Fax Number: | 2123195101 | | | | | | | | | | | | |
| <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> | | | | | | | | | | | | | |
| Phone: | 2123194900 | | | | | | | | | | | | |
| Email: | dmccoy@hhpatent.com | | | | | | | | | | | | |
| Correspondent Name: | HOLTZ, HOLTZ, GOODMAN & CHICK PC | | | | | | | | | | | | |
| Address Line 1: | 220 Fifth Avenue | | | | | | | | | | | | |
| Address Line 2: | 16TH Floor | | | | | | | | | | | | |
| Address Line 4: | NEW YORK, NEW YORK 10001-7708 | | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 13300 | | | | | | | | | | | | |

OP \$40.00 13846850

| | |
|--|--------------|
| NAME OF SUBMITTER: | Dawn McCoy |
| Signature: | /Dawn McCoy/ |
| Date: | 05/29/2013 |
| Total Attachments: 2 source=13300_Assignment#page1.tif source=13300_Assignment#page2.tif | |

ASSIGNMENT

ACG064173-USA-A
(12S1197)

In consideration of value received, I, having a residence as stated below above my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

SEMICONDUCTOR DEVICE

have sold and assigned and do hereby sell and assign to
KABUSHIKI KAISHA TOSHIBA
a Japanese corporation, having a business address at
1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan

its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said United States patent application:

(check one) executed concurrently herewith
 executed on _____ ;
 Application No. 13/846,850 , filed March 18, 2013 ;

and in and to all applications for patent and patents for invention including all divisions, reissues, continuations, substitutes and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing, continued prosecution, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invention.

I hereby grant the following law firm 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.

Holtz, Holtz, Goodman & Chick PC, 220 Fifth Avenue - 16th Floor, New York, N.Y.
10001-7708

ASSIGNMENT

ACG064178-USA-A
(12S1197)

[1st Inventor]

Residence Address: Yokohama-shi, Japan
Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan
Citizenship: Japan

Makoto Wada

Mar. 27 2013

Makoto Wada

Date:

[2nd Inventor]

Residence Address: Inagi-shi, Japan
Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan
Citizenship: Japan

Yuichi Yamazaki

Mar. 27, 2013

Yuichi Yamazaki

Date:

[3rd Inventor]

Residence Address: Yokohama-shi, Japan
Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan
Citizenship: Japan

Akihiro Kajita

Mar. 27, 2013

Akihiro Kajita

Date:

[4th Inventor]

Residence Address: Yokohama-shi, Japan
Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan
Citizenship: Japan

Atsunobu Isobayashi

Mar. 27, 2013

Atsunobu Isobayashi

Date:

[5th Inventor]

Residence Address: Yokohama-shi, Japan
Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome,
Minato-ku, Tokyo 105-8001, Japan
Citizenship: Japan

Tatsuro Saito

Mar. 27, 2013

Tatsuro Saito

Date: