

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4162827

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
NAOHISA OKUMURA	11/06/2016
YASUHISA SHINTOKU	11/01/2016
TETSUYA KUROSAWA	11/07/2016
HIROAKI KISHI	11/01/2016
RECEIVING PARTY DATA	
Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	105-8001
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15252915
CORRESPONDENCE DATA	
Fax Number:	(202)672-5399
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	202-672-5300
Email:	kcox-baione@foley.com, LMNovak@foley.com, ipdocketing@foley.com
Correspondent Name:	PAVAN K. AGARWAL
Address Line 1:	FOLEY & LARDNER LLP, SUITE 600
Address Line 2:	3000 K STREET, N.W.
Address Line 4:	WASHINGTON, D.C. 20007-5109
ATTORNEY DOCKET NUMBER:	114124-0112
NAME OF SUBMITTER:	KIMBERLEY A. COX-BAIONE
SIGNATURE:	/Kimberley A. Cox-Baione/
DATE SIGNED:	11/30/2016
Total Attachments: 4	
source=ExecutedAssignment#page1.tif	

source=ExecutedAssignment#page2.tif

source=ExecutedAssignment#page3.tif

source=ExecutedAssignment#page4.tif

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

KABUSHIKI KAISHA TOSHIBA
1-1, Shibaura 1-chome
Minato-ku, Tokyo 105-8001 Japan

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

SEMICONDUCTOR DEVICE

as set forth in this United States Patent Application

check executed concurrently herewith
one executed on _____
 Serial No 15/252,915 filed August 31, 2016

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of **FOLEY & LARDNER LLP** the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

<i>NAMES AND SIGNATURES OF INVENTORS</i>		
Name: Naohisa OKUMURA	Signature: <i>Naohisa Okumura</i>	Date: <i>Nov. 6, 2016</i>
Name: Yasuhisa SHINTOKU	Signature:	Date:
Name: Tetsuya KUROSAWA	Signature:	Date:
Name: Hiroaki KISHI	Signature:	Date:
Name:	Signature:	Date:
<i>NAMES AND SIGNATURES OF WITNESSES</i>		
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:

Note: *Prima facie* evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

KABUSHIKI KAISHA TOSHIBA
1-1, Shibaura 1-chome
Minato-ku, Tokyo 105-8001 Japan

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

SEMICONDUCTOR DEVICE

as set forth in this United States Patent Application

check executed concurrently herewith
one executed on _____
 Serial No 15/252,915 filed August 31,2016

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of **FOLEY & LARDNER LLP** the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS		
Name: Naohisa OKUMURA	Signature:	Date:
Name: Yasuhisa SHINTOKU	Signature: <i>Yasuhisa Shintoku</i>	Date: <i>Nov. 1, 2016</i>
Name: Tetsuya KUROSAWA	Signature: <i>Tetsuya Kurosawa</i>	Date: <i>Nov. 7, 2016</i>
Name: Hiroaki KISHI	Signature: <i>Hiroaki Kishi</i>	Date: <i>Nov. 1, 2016</i>
Name:	Signature:	Date:
NAMES AND SIGNATURES OF WITNESSES		
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:
Name:	Signature:	Date:

Note: *Prima facie* evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.