503559094 11/06/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HIDEKI OKUMURA	10/22/2015
MASANOBU TSUCHITANI	10/23/2015
HIROTO MISAWA	10/15/2015
AKIRA EZAKI	10/23/2015
TATSUYA SHIRAISHI	10/22/2015

RECEIVING PARTY DATA

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Postal Code:	105-8001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14846916

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ATTORNEY DOCKET NUMBER:	1242236-0741 US
NAME OF SUBMITTER:	DAVID M. TENNANT
SIGNATURE:	/David M. Tennant/
DATE SIGNED:	11/06/2015

Total Attachments: 4

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PATENT REEL: 036981 FRAME: 0966

EPAS ID: PAT3605721

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> PATENT REEL: 036981 FRAME: 0967

ASSIGNMENT

Now, therefore, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the undersigned Inventor(s) (hereinafter referred to as "ASSIGNOR(s)"), hereby seli(s), assign(s) and transfer(s) to Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE"), organized and existing under the laws of the JAPAN, having a place for the transaction of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan, and the successors and assigns of the ASSIGNEE, the entire right, title and interest for the United States and its territorial possessions, and in all foreign countries, in and to the inventions and any and all improvements thereon which are the subject of an application entitled:

SEMICONDUCTOR DEVICE

	OFMICOIADOCION DE A	IVL	
And which is di	sclosed in the U.S. patent application executed on disclosed in:	even date herewith, or if not so	
(a) 🗌	U.S. patent application executed on	[†]	
(b) 🛛	U.S. application no. 14/846.916 filed on September	<u>er 7. 2015</u> .	
(c) 🗌	International (e.g., PCT, JP) application no.	filed on	
right to claim pr thereof, and in a examination ce	ne above application and any legal equivalent there- riority, and in and to any division, continuation or co- and to all resulting Letters Patents or any reissue, n rtificate, post grant review certificate, inter partes re hold the same to the full end of the term or terms fo granted;	ntinuation-in-part, renewal or sut eexamination certificate, suppler view certificate, or otherwise, the	ostitu nenta ereof,
	authorize(s) and request(s) the issuing authority to i pplications to said ASSIGNEE or its successors an		İ
	hereby covenant(s) that ASSIGNOR(S) has/have ti		

Without further payment or compensation by the ASSIGNEE or its successors and assigns, ASSIGNOR(S) further covenant(s) and agree(s) to communicate to said ASSIGNEE or its representatives, agents, its successors or assigns, any facts relating to said invention or inventions including evidence for purposes of interference or other administrative or legal proceedings whenever requested; to testify in any interference, legal or administrative proceedings, whenever requested; to execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and to do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

would conflict with this assignment; and

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.

IN WITNESS WHEREOF, the ASSIGNOR(S) has/have hereunto affixed his/her/their signatures on the date below written.

- 1) Hideki Okumura Hideki OKUMURA Oct. 22, 2015
 (Signature) (Type or Print Name) (Date)
- 2) Masanobu Tsuchtant Masanobu TSUCHITANI Oct 23, 2015 (Signeture) (Type or Print Name) (Date)
- 3) Hiroto MISAWA
 (Signature) (Type or Print Name) (Date)
- 4) AKIRA ESAKI Oct 23, 20/5
 (Signature) (Type or Print Name) (Date)
- 5) Tatsuya Shiraishi Tatsuya SHIRAISHI Oct. 22, 2015 (Signature) (Type or Print Name) (Date)

ASSIGNMENT

Now, therefore, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, the undersigned Inventor(s) (hereinafter referred to as "ASSIGNOR(S)"), hereby sell(s), assign(s) and transfer(s) to Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE"), organized and existing under the laws of the JAPAN, having a place for the transaction of business at 1-1.Shibaura 1-chome, Minato-ku, Tokyo, Japan, and the successors and assigns of the ASSIGNEE, the entire right, title and interest for the United States and its territorial possessions, and in all foreign countries, in and to the inventions and any and all improvements thereon which are the subject of an application entitled:

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executed, was	disclosed in the U.S. patent application executed on even date herewith, or if not so
(a) 🗌	U.S. patent application executed on,
(b) 🔀	U.S. application no. 14/846.916 filed on September 7, 2015,
(c) 🗆	international (e.g., PCT, JP) application nofiled on

And in and to the above application and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to any division, continuation or continuation-in-part, renewal or substitute thereof, and in and to all resulting Letters Patents or any reissue, reexamination certificate, supplemental examination certificate, post grant review certificate, inter partes review certificate, or otherwise, thereof, to have and to hold the same to the full end of the term or terms for which any and all of said Letters Patent may be granted;

ASSGNOR(S) authorize(s) and request(s) the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns;

ASSIGNOR(S) hereby covenant(s) that ASSIGNOR(S) has/have the full power to make this assignment, and that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment; and

Without further payment or compensation by the ASSIGNEE or its successors and assigns, ASSIGNOR(S) further covenant(s) and agree(s) to communicate to said ASSIGNEE or its representatives, agents, its successors or assigns, any facts relating to said invention or inventions including evidence for purposes of interference or other administrative or legal proceedings whenever requested; to testify in any interference, legal or administrative proceedings, whenever requested; to execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and to do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

	Hideki OKUMURA	
(Signature)	(Type or Print Name)	(Date)
	Masanobu TSUCHITANI	
(Signature)	(Type or Print Name)	(Date)
Hiroto misawa	/ Hiroto MISAWA	047 / J , 2c
(Signature)	(Type or Print Name)	(Date)
	Akira ĘZAKI	
(Signature)	(Type or Print Name)	(Date)
		·
	Tatsuya SHIRAISHI	

Any attorney of record is authorized and requested by the execution of this assignment to insert into this assignment any further information necessary for recordation of this document.