PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4916765

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE'S NAME FROM "TOSHIBA ELECTRONIC DEVICES & STORAGE CORP." TOTOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION previously recorded on Reel 044290 Frame 0453. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
RYO WADA	11/21/2017

RECEIVING PARTY DATA

Name:	TOSHIBA ELECTRONIC DEVICES & STORAGE CORPORATION
Street Address: 1-1, SHIBAURA 1-CHOME	
City: MINATO-KU, TOKYO	
State/Country:	JAPAN
Postal Code:	105-0023

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15830682

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 202-626-3600

Email: toshibapatents@whitecase.com

Correspondent Name: WHITE & CASE LLP
Address Line 1: 701 13TH STREET NW
Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	1242236-0913-058 US
NAME OF SUBMITTER:	DAVID M. TENNANT
SIGNATURE:	/David M. Tennant/
DATE SIGNED:	04/16/2018

Total Attachments: 3

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PATENT 504870025 REEL: 045948 FRAME: 0963

504670065 12/04/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4716787

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RYO WADA	11/21/2017

RECEIVING PARTY DATA

Name:	TOSHIBA ELECTRONIC DEVICES & STORAGE CORP.
Street Address:	1-1, SHIBAURA 1-CHOME
City:	MINATO-KU, TOKYO
State/Country:	JAPAN
Postal Code:	105-0023

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15830682

CORRESPONDENCE DATA

Fax Number:

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Phone: 202-626-3600

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Correspondent Name: WHITE & CASE LLP
Address Line 1: 701 13TH STREET NW
Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	1242236-0913-058 US
NAME OF SUBMITTER:	DAVID M. TENNANT
SIGNATURE:	/David M. Tennant/
DATE SIGNED:	12/04/2017

Total Attachments: 2

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> PATENT REEL: 045948 FRAME: 0964

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 (1)Kabushiki Kaisha Toshiba, (2)Toshiba Electronic Devices & Storage Corporation (hereinafter referred to as "ASSIGNEE"), organized and existing under the laws of the JAPAN, having places for the transaction of business at (1) 1-1, Shibaura 1-chome, Minato-ku, Tokvo, 105-8001, Japan, (2)1-1, Shibaura 1-chome, Minato-ku, Tokvo, 105-8001, Japan, (2)1-1, Shibaura 1-chome, Minato-ku, Tokvo, 105-8001, Japan, (2)1-1, Shibaura 1-chome, 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

SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING SAME

And which is disclosed in the U.S. patent application executed on even date herewith, or if not so executed, was disclosed in:

(a) 🔲	U.S. patent application executed on
(b) 🗵	U.S. application no 15/830, 682 filed on December 4, 2017
(c) [International (e.g., PCT, JP) application no. filed 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.

1

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)	Ryjer Wada. (Signature)	Ryo WADA (Type or Print Name)	Nov. 21, 2017
	(ຕະຕິບສາກາ ຜ)	Liype of Finit Name)	(Llate)