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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Tomoaki Atsumi	04/22/2015
Shuhei NAGATSUKA	04/27/2015
Tamae Moriwaka	04/23/2015
Yuta ENDO	04/24/2015

RECEIVING PARTY DATA

Name:	SEMICONDUCTOR ENERGY LABORATORY CO., LTD.
Street Address:	398, HASE
City:	ATSUGI-SHI, KANAGAWA-KEN
State/Country:	JAPAN
Postal Code:	243-0036

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16275380

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	12732-1453003
NAME OF SUBMITTER:	SHARON M. ALLEN
SIGNATURE:	/Sharon M. Allen/
DATE SIGNED:	02/14/2019

Total Attachments: 2

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> **PATENT** REEL: 048336 FRAME: 0018 505329578

ASSIGNMENT

For valuable consideration, We, <u>Tomoaki ATSUMI of Hadano</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Shuhei NAGATSUKA of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Tamae MORIWAKA of Isehara</u>, <u>Kanagawa</u>, <u>Japan and Yuta ENDO of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u> hereby assign to <u>Semiconductor Energy Laboratory Co.</u>, <u>Ltd.</u>, a <u>Japanese</u> corporation having a place of business at:

398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE, filed March 4, 2015, and assigned U.S. Serial Number 14/637,542, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Signature	Tomoaki atsumi
Name:	Ťomoaki ATSUMI
Date:	04/22/2015
Signature	Shahal MAGATSULM
Name:	Shubei NAGATSUKA
Date:	84/27/2015
Signature	Tamae Moriwaka
Name:	Tamae MORIWAKA
Date:	04 /23 / 2015

PATENT REEL: 048336 FRAME: 0019

Attorney Docket No. 12732-1453002 Client Ref. No. US20194-C1 Page 2 of 2

Signature Yuta Endo
Name: Yuta ENDO
Date: 04/14/10/5

PATENT REEL: 048336 FRAME: 0020

RECORDED: 02/14/2019