PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUNPEI YAMAZAKI	10/18/2010
JUN KOYAMA	10/19/2010
KIYOSHI KATO	10/20/2010

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:	15615873

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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ATTORNEY DOCKET NUMBER: 12732-0726005

NAME OF SUBMITTER: JANELLE A. JACKSON

SIGNATURE: /Janelle A. Jackson/

DATE SIGNED: 08/01/2017

Total Attachments: 1

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PATENT 504483441 REEL: 043156 FRAME: 0491

ASSIGNMENT

For valuable consideration, We, <u>Shunpei YAMAZAKI of Setagaya</u>, <u>Tokyo</u>, <u>Japan</u>, <u>Jun KOYAMA of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan and Kiyoshi KATO 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 fo
United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE
filed $\frac{10/28/2010}{}$, and assigned U.S. Serial Number $\frac{12/914,672}{}$, and w
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 registration
granted for any of said inventions or improvements, and the right to claim priority based on the filing date o
said application under the International Convention for the Protection of Industrial Property, the Paten
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	Ships Glogila
Name:	Shunpei YAMAZAKI
Date:	10/18/2010
Signature	Jun Koyama.
Name:	Yud KOYAMA //
Date:	10/19/2010
Signature	Kiyoshi Kato
Name:	Kiyoshi KATO
Date:	10/20/20/0

RECORDED: 08/01/2017

PATENT REEL: 043156 FRAME: 0492