PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Shunpei Yamazaki	07/09/2010
Miyuki HOSOBA	07/09/2010
Junichiro Sakata	07/09/2010
Hideaki Kuwabara	07/09/2010

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:	16121708

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	12732-0667007
NAME OF SUBMITTER:	SHARON M. ALLEN
SIGNATURE:	/Sharon M. Allen/
DATE SIGNED:	09/05/2018

Total Attachments: 2

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PATENT 505078600 REEL: 046791 FRAME: 0259

ASSIGNMENT

For valuable consideration, We, Shunpei YAMAZAKI of Setagaya, Tokyo, Japan, Miyuki HOSOBA of Isehara, Kanagawa, Japan, Junichiro SAKATA of Atsugi, Kanagawa, Japan and Hideaki KUWABARA of Isehara, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese 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 AND
MANUFACTURING METHOD THEREOF, filed 7/29/2010 , and assigned U.S. Serial
Number 12/846,603 , 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	Shapen Bayela
Name:	Shunpei YAMAZAKI
Date:	07/09/2010
Signature	Miyuki HOSOBA
Name:	Miyuki HOSOBA
Date:	09/09/2010

Attorney Docket No. 12732-0667006 Client Reference No. US04590-D1C1C1C1C1 Page 2 of 2

Signature ()

Name:

Impichiro SAKATA

Date:

09/12/20/6

Signature

Hideaki KUWABARA

Name: Date:

07/09/2010

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RECORDED: 09/05/2018