505416151 04/08/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Hajime Kimura	03/10/2017
Shunpei Yamazaki	03/08/2017

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:	16377405

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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) 783-5070 Email: apsi@fr.com **Correspondent Name:** JOHN F. HAYDEN

Address Line 1: FISH & RICHARDSON P.C.

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ATTORNEY DOCKET NUMBER:	12732-1813002
NAME OF SUBMITTER:	SHARON M. ALLEN
SIGNATURE:	/Sharon M. Allen/
DATE SIGNED:	04/08/2019

Total Attachments: 2

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> **PATENT REEL: 048820 FRAME: 0225** 505416151

ASSIGNMENT

For valuable consideration, We, <u>Hajime KIMURA of Atsugi</u>, <u>Kanagawa</u>, <u>Japan and Shunpei YAMAZAKI of Setagaya</u>, <u>Tokyo</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 <u>SEMICONDUCTOR DEVICE</u> , <u>SEMICONDUCTOR</u>
WAFER, MODULE, ELECTRONIC DEVICE, AND MANUFACTURING METHOD THEREOF,
filed March 10, 2017 , and assigned U.S. Serial Number 15/455,637 , 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.
1-70403D a
Signature Hajime (LIMO)
Name: Hajime KIMURA
Signature Hajime CLMURA Name: Hajime KIMURA Date: 03/10/2017
Signature
Name: Shunpei YAMAZAKI
Date:

PATENT REEL: 048820 FRAME: 0226

Attorney Docket No. 12732-1813001 Client Reference No. US24062 Page 2 of 2

ASSIGNMENT

For valuable consideration, We, <u>Hajime KIMURA of Atsugi</u>, <u>Kanagawa</u>, <u>Japan and Shunpei YAMAZAKI of Setagaya</u>, <u>Tokyo</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:

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said applic	ation, 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 applic	ation under the International Convention for the Protection of Industrial Property, the Paten
Cooperation	n Treaty, the European Patent Convention, and all other treaties of like purposes; and we
authorize tl	he Assignee to apply in all countries in our name or in its own name for patents, utility models
design regi	istrations and like rights of exclusion and for inventors' certificates for said inventions and
improveme	ents; and we agree for ourselves and our respective heirs, legal representatives and assigns
without fur	ther 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 as	ssignment.
Signature	
Name:	Hajime KIMURA
Date:	
Signature	Aligno Jugali
Name:	Shunpei YAMAZAKX
Date:	03/08/20/7

RECORDED: 04/08/2019

PATENT REEL: 048820 FRAME: 0227