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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
HIDEKO INOUE	04/03/2015
YASUSHI KITANO	04/03/2015
HIROMI SEO	04/02/2015
TATSUYOSHI TAKAHASHI	04/03/2015
SATOSHI SEO	04/03/2015

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:	15704137

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	12732-1486002	
NAME OF SUBMITTER:	JANELLE A. JACKSON	
SIGNATURE:	/Janelle A. Jackson/	
DATE SIGNED:	11/15/2017	

Total Attachments: 2

PATENT REEL: 044139 FRAME: 0663

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PATENT REEL: 044139 FRAME: 0664

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ASSIGNMENT

For valuable consideration, We, <u>Hideko INOUE of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Yasushi KITANO of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Hiromi SEO of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Tatsuyoshi TAKAHASHI of Atsugi</u>, <u>Kanagawa</u>, <u>Japan and Satoshi SEO of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan hereby assign to 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 HETEROCYCLIC COMPOUND, LIGHT-EMITTING
ELEMENT, LIGHT-EMITTING DEVICE, ELECTRONIC APPLIANCE, AND LIGHTING DEVICE,
filed April 16, 2015 , and assigned U.S. Serial Number 14/688,383 , 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	I bideke Snow
Name:	Hideko INOUE
Date:	04/03/2015
Signature	Yasushi Kitano
Name:	Yasushi KITANO
Date:	04/03/2015

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Signature Hromi Soo

Name: Hiromi SEO

RECORDED: 11/15/2017

Date: 04/02/2015

Signatur Tatsuyoshi Takahashi

Name: Tatsuyoshi TAKAHASHI

Date: 64 / 63 / 2015

Signature Satoshi Seo

Name: Satoshi SEO

Date: 04/03/2015

PATENT REEL: 044139 FRAME: 0666