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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2607546

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Yasushi Kitano	10/16/2013
Hiroshi Kadoma	10/21/2013
Satoko Shitagaki	10/28/2013
Satoshi Seo	10/18/2013
Hiromi Seo	10/24/2013
Tatsuyoshi Takahashi	10/21/2013

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:	14068319

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REEL: 031564 FRAME: 0787

PATENT

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Signature:	/April K. Saunders-Fuller/
Date:	11/07/2013
Total Attachments: 2 source=12732-1257001-ASN#page1.tif source=12732-1257001-ASN#page2.tif	

PATENT REEL: 031564 FRAME: 0788

ASSIGNMENT

For valuable consideration, We, <u>Yasushi KITANO of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Hiroshi KADOMA of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Satoko SHITAGAKI of Isehara</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Satoshi SEO of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Hiromi SEO of Sagamihara</u>, <u>Kanagawa</u>, <u>Japan and Tatsuyoshi TAKAHASHI 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 HETEROCYCLIC COMPOUND, LIGHT-EMITTING ELEMENT, LIGHT-EMITTING DEVICE, ELECTRONIC DEVICE, AND LIGHTING DEVICE, filed October 31, 2013, and assigned U.S. Serial Number 14/068,319, 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	Yasushi Kitano		
Name:	Yasushi KITANO		
Date:	10/16/2013		
Signature	Hiroshi KADOMA		
Name:	Hiroshi KADOMA		
Date:	15/21/2013		

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Satoko Shitagalsi Signature Satoko SHITAGAKI Name: 10/28/2013 Date: Signature Name: Satoshi SEO 2013 10/18 Date: Signature Name: Hiromi SEO Date: 20/3 Tatsuyoshi Takahashi Signature Name: Tatsuyoshi TAKAHASHI Date: 10/21/2013

RECORDED: 11/07/2013

PATENT REEL: 031564 FRAME: 0790