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PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYAI	_	ASSIGNMENT		
CONVEYING PARTY D	лтл			
	AIA			
		Name	Execution Date	
KIYOSHI KATO			11/27/2015	
RECEIVING PARTY DA	TA			
Name:	SEMICONDUCTOR ENERGY LABORATORY CO., LTD.			
Street Address:	398, HASE			
City:	ATSUGI-SHI, KANAGAWA-KEN			
State/Country:	JAPAN			
Postal Code:	243-0036			
Application Number:		14963434		
	e sent to provided	(877)769-7945 <i>the e-mail address first; if that is un</i> <i>; if that is unsuccessful, it will be se</i> (202) 783-5070 APSI@fr.com JOHN F. HAYDEN FISH & RICHARDSON P.C. P.O.BOX 1022 MINNEAPOLIS, MINNESOTA 55440-1	nt via US Mail.	
ATTORNEY DOCKET NUMBER:		12732-1620001		
NAME OF SUBMITTER:		JANELLE A. JACKSON	JANELLE A. JACKSON	
SIGNATURE:		/Janelle A. Jackson/	/Janelle A. Jackson/	
SIGNATURE:				

ASSIGNMENT

For valuable consideration, I, <u>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 for United States Patent signed by me this day, entitled SEMICONDUCTOR DEVICE, MEMORY DEVICE, AND ELECTRONIC DEVICE, filed December 9, 2015, and assigned U.S. Serial Number <u>14/963,434</u>, and I authorize and request the Assignee or 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 I authorize the Assignee to apply in all countries in my 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 I agree for myself and my 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	Kiyor Kato
Name:	Kiyoshi KATO
Date:	11/27/2015

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RECORDED: 12/16/2015