501926438 05/18/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Masashi Fujita	04/12/2012
Yutaka Shionoiri	04/12/2012
Kiyoshi Kato	04/12/2012
Hidetomo Kobayashi	04/12/2012

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:	13469143

CORRESPONDENCE DATA

 Fax Number:
 (877)769-7945

 Phone:
 (202) 783-5070

 Email:
 apsi@fr.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: John F. Hayden

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER: 12732-1044001

NAME OF SUBMITTER: April K. Saunders-Fuller

Total Attachments: 2

source=12732-1044001-ASN#page1.tif source=12732-1044001-ASN#page2.tif

> PATENT REEL: 028236 FRAME: 0021

40.00 13469

Attorney Docket No. 12732-1044001 Client Reference No. US15272

ASSIGNMENT

For valuable consideration, We, <u>Masashi FUJITA of Machida, Tokyo, Japan, Yutaka SHIONOIRI of Isehara, Kanagawa, Japan, Kiyoshi KATO of Atsugi, Kanagawa, Japan and Hidetomo KOBAYASHI of Isehara, Kanagawa, Japan hereby assign to <u>Semiconductor Energy Laboratory Co., Ltd.</u>, a <u>Japanese</u> corporation having a place of business at:</u>

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 States Patent signed by us this day, entitled **SEMICONDUCTOR DEVICE**, United filed May 11, 2012, and assigned U.S. Serial Number 13/469, 143, 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	pansashi Sujita
Name:	Masashi FUJITA
Date:	04/12/2012
Signature	Yuraka SHIONOIRI
Name:	Yutaka SHIONOIRI
Date:	04/12/2012

PATENT REEL: 028236 FRAME: 0022

Attorney Docket No. 12732-1044001 Client Reference No. US15272

Signature

Kiyoshi KATO

Name: Date:

Signature Hideromo KOBAYASHI

Name:

Hidetomo KOBAYASHI

Date:

04/12/2012

PATENT REEL: 028236 FRAME: 0023

RECORDED: 05/18/2012