PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Makoto Udagawa	10/25/2002
Masahiko Hayakawa	10/25/2002
Jun Koyama	10/25/2002
Mitsuaki Osame	10/28/2002
Aya Anzai	10/25/2002

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:	16358889

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.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	12732-0126010	
NAME OF SUBMITTER:	SHARON M. ALLEN	
SIGNATURE:	/Sharon M. Allen/	
DATE SIGNED:	03/20/2019	
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Total Attachments: 2

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source=Assignment #page2.tif

PATENT REEL: 048650 FRAME: 0281

ASSIGNMENT

For valuable consideration, We, <u>Makoto UDAGAWA of Atsugi</u>, <u>Kanagawa, Japan</u>, and <u>Masahiko HAYAKAWA of Atsugi</u>, <u>Kanagawa, Japan</u>, and <u>Jun KOYAMA of Atsugi</u>, <u>Kanagawa, Japan</u>, and <u>Mitsuaki OSAME of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, and <u>Aya ANZAI 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 LIGHT EMITTING

DEVICE filed on November 4, 2002, and assigned U.S. Serial Number 10/286,868, 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: Makoto Udagava

Name:

Makoto UDAGAWA

Date:

10/25/2002

Signature: Masahakar Hujakawa

Name:

Masahiko HAYAKAWA

Date:

10/25/2002

Signature:

Jun Acy

Name:

<u>lun KUYAMA</u>

Date:

10/25/2002

Signature: Mitsuak, Osame

Name:

Mitsuaki OSAME

Date:

10/28/2002

Attorney Docket No. 12732-0126008 Client Ref. No. US06064/6191-D1C1C1C1C1C1C1C1 Page 2 of 2

Signature:

Aya ANZAI

Date:

10/25/2002

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RECORDED: 03/20/2019