PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7175494

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KEI TAKAHASHI	02/01/2022
TAKESHI AOKI	01/30/2022
MUNEHIRO KOZUMA	01/20/2022
TAKAYUKI IKEDA	01/20/2022

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:	17635268

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:	12732-2196US1
NAME OF SUBMITTER:	APRIL SAUNDERS-FULLER
SIGNATURE:	/April Saunders-Fuller/
DATE SIGNED:	02/14/2022

Total Attachments: 6

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ASSIGNMENT

For valuable consideration, We, <u>Kei TAKAHASHI of Rifuiarejidensuaikouishida106</u>, 722-1, <u>Ishida, Isehara-shi, Kanagawa-ken, 259-1116</u>, <u>Japan, Takeshi AOKI of 3-43-3</u>, <u>Nakashinden, Ebina-shi, Kanagawa-ken, 243-0422</u>, <u>Japan, Munehiro KOZUMA of Atsugi, Kanagawa, Japan and Takayuki IKEDA of Atsugi, Kanagawa, Japan hereby assign to <u>Semiconductor Energy Laboratory Co., Ltd.</u>, a <u>Japanese corporation having a place of business at:</u></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
United States Patent signed by us this day, entitled SEMICONDUCTOR DEVICE AND METHOD FOR
OPERATING SEMICONDUCTOR DEVICE, filed February 14, 2022, and assigned U.S. Serial
Number17/635,268, 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	Kei Takahashi
Name:	Kei TAKAHASHI
Date:	02/01/2022
Signature	
Name:	Takeshi AOKI
Date:	

Attorney Docket No. 12732-2196US1 Client Reference No. PCTUS30193/30818/30984 Page 2 of 6

Signature		
Name:	Munehiro KOZUMA	
Date:		
Signature		
Name:	Takayuki IKEDA	
Date:		

ASSIGNMENT

For valuable consideration, We, <u>Kei TAKAHASHI of Rifuiarejidensuaikouishida106, 722-1.</u> Ishida, Isehara-shi, Kanagawa-ken, 259-1116, Japan, Takeshi AOKI of 3-43-3, Nakashinden, Ebina-shi, Kanagawa-ken, 243-0422, Japan, Munehiro KOZUMA of Atsugi, Kanagawa, Japan and Takayuki IKEDA of <u>Atsugi</u>, Kanagawa, Japan hereby assign to <u>Semiconductor Energy Laboratory Co., Ltd.</u>, a Japanese corporation having a place of business at:

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Kei TAKAHASHI	
Takeshi Aoki	
Takeshi AOKI	
01/30/2022	

Attorney Docket No. 12732-2196US1 Client Reference No. PCTUS30193/30818/30984 Page 4 of 6

Signature		
Name:	Munehiro KOZUMA	
Date:		
Signature		
Name:	Takayuki IKEDA	
Date:		

ASSIGNMENT

For valuable consideration, We, <u>Kei TAKAHASHI of Rifuiarejidensuaikouishida106</u>, 722-1, <u>Ishida, Isehara-shi, Kanagawa-ken, 259-1116</u>, <u>Japan, Takeshi AOKI of 3-43-3</u>, <u>Nakashinden, Ebina-shi, Kanagawa-ken, 243-0422</u>, <u>Japan, Munehiro KOZUMA of Atsugi, Kanagawa, Japan and Takayuki IKEDA of Atsugi, Kanagawa, Japan hereby assign to <u>Semiconductor Energy Laboratory Co., Ltd.</u>, a <u>Japanese corporation having a place of business at:</u></u>

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reasonably request to effectuate fully this assignment.
Signature
Name: Kei TAKAHASHI
Date:
Signature
Name: Takeshi AOKI
Date:

Attorney Docket No. 12732-2196US1 Client Reference No. PCTUS30193/30818/30984 Page 6 of 6

Signature Munchiro Rozama

Name: Munchiro KOZUMA

Date: 01/20/2022

Signature Takayuki Ikeda

Name: Takayuki IKEDA

Date: 01/20/2022

PATENT REEL: 059008 FRAME: 0438

RECORDED: 02/14/2022