504658976 11/28/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHUNPEI YAMAZAKI	11/09/2017
KENICHI OKAZAKI	11/13/2017
DAISUKE KUROSAKI	11/13/2017
YASUTAKA NAKAZAWA	11/13/2017
KAZUNORI WATANABE	11/09/2017
KOJI KUSUNOKI	11/09/2017

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:	15820965

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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ATTORNEY DOCKET NUMBER:	12732-1902001
NAME OF SUBMITTER:	JANELLE A. JACKSON
SIGNATURE:	/Janelle A. Jackson/
DATE SIGNED:	11/28/2017

PATENT 504658976 REEL: 044234 FRAME: 0205

Total Attachments: 6 source=12732-1902001 Assignment#page1.tif source=12732-1902001 Assignment#page2.tif source=12732-1902001 Assignment#page3.tif source=12732-1902001 Assignment#page4.tif source=12732-1902001 Assignment#page5.tif

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Attorney Docket No. 12732-1902001 Client Reference No. US25632/26616 Page 1 of 6

ASSIGNMENT

For valuable consideration, We, Shunpei YAMAZAKI of Setagaya, Tokyo, Japan, Kenichi OKAZAKI of Tochigi, Tochigi, Japan, Daisuke KUROSAKI of Utsunomiya, Tochigi, Japan, Yasutaka NAKAZAWA of Tochigi, Tochigi, Japan, Kazunori WATANABE of Machida, Tokyo, Japan and Koji KUSUNOKI of Kawasaki, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese 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 fo
United States Patent signed by us this day, entitled <u>DISPLAY DEVICE</u> , <u>DISPLAY MODULE</u> , <u>ANI</u>
ELECTRONIC DEVICE, filed November 22, 2017 , and assigned U.S. Seria
Number, 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 al
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, lega
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 Sluger Buyaki
Name: Shunpei YAMAZAKI
Date: 11/09/2019
Signature
Name: Kenichi OKAZAKI
Date:

Attorney Docket No. 12732-1902001 Client Reference No. US25632/26616 Page 2 of 6

Signature:	
Name:	Daisuke KUROSAKI
Date:	
Signature:	
Name:	Yasutaka NAKAZAWA
Date:	
Signature:	
Name:	Kazunori WATANABE
Date:	
Signature:	
Name:	Koji KUSUNOKI
Date:	

Attorney Docket No. 12732-1902001 Client Reference No. US25632/26616 Page 3 of 6

ASSIGNMENT

For valuable consideration, We, Shunpei YAMAZAKI of Setagaya, Tokyo, Japan, Kenichi OKAZAKI of Tochigi, Tochigi, Japan, Daisuke KUROSAKI of Utsunomiya, Tochigi, Japan, Yasutaka NAKAZAWA of Tochigi, Tochigi, Japan, Kazunori WATANABE of Machida, Tokyo, Japan and Koji KUSUNOKI of Kawasaki, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese corporation having a place of business at:

398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

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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 <u>DISPLAY DEVICE</u> , <u>DISPLAY MODULE</u> , <u>ANI</u>
ELECTRONIC DEVICE, filed November 22, 2017 , and assigned U.S. Series
Number15/820,965, and we authorize and request the attorneys appointed in said applicatio
o hereafter complete this assignment by inserting above the filing date and serial number of said applicatio
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 t
claim priority based on the filing date of said application under the International Convention for th
Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and a
other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in it
own name for patents, utility models, design registrations and like rights of exclusion and for inventors
ertificates for said inventions and improvements; and we agree for ourselves and our respective heirs, lega-
representatives and assigns, without further compensation to perform such lawful acts and to sign such
urther applications, assignments, Preliminary Statements and other lawful documents as the Assignee mag
easonably request to effectuate fully this assignment.
Signature
Name: Shunpei YAMAZAKI
Date:
Signature Kenichi OKAZAKI
Name: Kenichi OKAZAKI
Date: ///3/20/7

Attorney Docket No. 12732-1902001 Client Reference No. US25632/26616 Page 4 of 6

Signature:	Daisuke Kurosalci
Name:	Daisuke KUROSAKI
Date:	11/13/2017
	,
Signature:	Yasutaka NAKAZAWA
Name:	Yasutaka NAKAZAWA
Date:	11/13/2017
Signature:	
Name:	Kazunori WATANABE
Date:	
Signature:	
Name:	Koji KUSUNOKI
Date:	

Attorney Docket No. 12732-1902001 Client Reference No. US25632/26616 Page 5 of 6

ASSIGNMENT

For valuable consideration, We, Shunpei YAMAZAKI of Setagaya, Tokyo, Japan, Kenichi OKAZAKI of Tochigi, Tochigi, Japan, Daisuke KUROSAKI of Utsunomiya, Tochigi, Japan, Yasutaka NAKAZAWA of Tochigi, Tochigi, Japan, Kazunori WATANABE of Machida, Tokyo, Japan and Koji KUSUNOKI of Kawasaki, Kanagawa, Japan hereby assign to Semiconductor Energy Laboratory Co., Ltd., a Japanese corporation having a place of business at:

398, Hase, Atsugi-shi, Kanagawa-ken, 243-0036 Japan

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LECTRONIC DEVICE, filed November 22, 2017 , and assigned U.S. S	Serial
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hereafter complete this assignment by inserting above the filing date and serial number of said applic	ation
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aim priority based on the filing date of said application under the International Convention fo	r the
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ner treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or	in its
on name for patents, utility models, design registrations and like rights of exclusion and for inver-	itors'
rtificates for said inventions and improvements; and we agree for ourselves and our respective heirs,	legal
presentatives and assigns, without further compensation to perform such lawful acts and to sign	such
ther applications, assignments, Preliminary Statements and other lawful documents as the Assignee	may
isonably request to effectuate fully this assignment.	
gnature	
me: Shunpei YAMAZAKI	
ite:	
gnature ıme: Kenichi OKAZAKI	
ate:	

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Signature:	
Name:	Daisuke KUROSAKI
Date:	
Signature:	
Name:	Yasutaka NAKAZAWA
Date:	
Signature:	Kazumrij Watanale
Name:	Kazunori WATANABE
Date:	11/09/2017
	i f
Signature:	Leyi kusunski
Name:	Koji KUSUNOKI
Date:	11 / 1
Date.	(1/69/2017)

RECORDED: 11/28/2017