507570974 10/31/2022

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| Susumu KAWASHIMA | 04/03/2020 |
| Koji Kusunoki | 04/03/2020 |
| Kei Takahashi | 04/02/2020 |
| Shunpei YAMAZAKI | 04/02/2020 |

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: | 17976919 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 12732-2012002 |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | SHARON M. ALLEN |
| SIGNATURE: | /Sharon M. Allen/ |
| DATE SIGNED: | 10/31/2022 |

Total Attachments: 4

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PATENT 507570974 REEL: 061589 FRAME: 0229

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ASSIGNMENT

For valuable consideration, We, <u>Susumu KAWASHIMA of Atsugi</u>, <u>Kanagawa</u>, <u>Japan, Koji KUSUNOKI of Isehara</u>, <u>Kanagawa</u>, <u>Japan, Kei TAKAHASHI of Isehara</u>, <u>Kanagawa</u>, <u>Japan and Shunpei YAMAZAKI of Setagaya</u>, <u>Tokyo</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 DISPLAY DEVICE, DRIVING METHOD OF DISPLAY |
| DEVICE, AND ELECTRONIC DEVICE, filed April 15, 2020, and assigned U.S. Serial |
| 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 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 | Susumy Kangshina | |
|-----------|------------------|---|
| Name: | Susumu KAWASHIMA | |
| Date: | 84/03/2020 | |
| | foj: kusunoki | |
| Name: | Koji KUSUNOKI | _ |
| Date: | 04(03/ >>20 | |

Attorney Docket No. 12732-2012US1 Client Reference No. PCTUS27456-27539-27888-27889-28297 Page 2 of 4

Name: Kei TAKAHASHI
Date:

Signature

Name: Shunpei YAMAZAKI

Date:

04/02/2020

ASSIGNMENT

For valuable consideration, We, <u>Susumu KAWASHIMA of Atsugi</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Koji KUSUNOKI of Isehara</u>, <u>Kanagawa</u>, <u>Japan</u>, <u>Kei TAKAHASHI of Isehara</u>, <u>Kanagawa</u>, <u>Japan and Shunpei YAMAZAKI of Setagaya</u>, <u>Tokyo</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 an |
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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, DRIVING METHOD OF DISPLA</u> |
| DEVICE, AND ELECTRONIC DEVICE, filedApril 15, 2020, and assigned U.S. Series |
| Number, and we authorize and request the attorneys appointed in said applicatio |
| to 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 |
| 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 |
| easonably request to effectuate fully this assignment. |
| |
| |
| Signature |
| Name: Susumu KAWASHIMA |
| Date: |
| |
| |
| Signature |
| Name: Koji KUSUNOKI |
| Date: |

Attorney Docket No. 12732-2012US1 Client Reference No. PCTUS27456-27539-27888-27889-28297 Page 4 of 4

| Signature | Kei Tookahashi |
|-----------|------------------|
| Name: | Kei TAKAHASHI |
| Date: | 04/02/020 |
| Signature | |
| Name: | Shunpei YAMAZAKI |
| Date: | |

PATENT REEL: 061589 FRAME: 0234

RECORDED: 10/31/2022