504934634 05/29/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4981380

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Daejin CHOI | 03/03/2017 |
| Donghoon LEE | 03/07/2017 |
| Changwoan YANG | 02/08/2017 |
| Dongjeong KIM | 03/06/2017 |
| Wonsup BAE | 03/27/2017 |
| Jinsung KIM | 03/15/2017 |

RECEIVING PARTY DATA

| Name: | LG ELECTRONICS INC. |
|-----------------|-----------------------------------|
| Street Address: | 128, YEOUI-DAERO, YEONGDEUNGPO-GU |
| City: | SEOUL |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 07336 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15692207 |

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) 626-6363 **Email:** apsi@fr.com

Correspondent Name: KARINA CALLISTE

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

| ATTORNEY DOCKET NUMBER: | 19819-0757001 |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | AMANDA PETERSEN |
| SIGNATURE: | /Amanda Petersen/ |
| DATE SIGNED: | 05/29/2018 |

PATENT 504934634 REEL: 045923 FRAME: 0677

Total Attachments: 8 source=Assignment#page1.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif source=Assignment#page8.tif

PATENT REEL: 045923 FRAME: 0678

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, <u>Daejin CHOI</u>, <u>Dongieong KIM</u>, <u>Changwoan YANG</u>, <u>Donghoon LEE</u>, <u>Jinsung KIM</u>, and <u>Wonsup BAE</u> each individually assign to <u>LG Electronics Inc.</u>, a corporation formed under the laws of <u>Republic of Korea</u>, and having a principal place of business at <u>128</u>, <u>Yeoui-daero</u>, <u>Yeongdeungpo-gu</u>, <u>Seoul 07336 Republic of Korea</u>, and its successors, transferees, and assignees (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the subject matter (the "Subject Matter") of a patent application that names us as inventors, is titled "<u>REFRIGERATOR</u>," and was filed in the United States Patent and Trademark Office on <u>August 31</u>, <u>2017</u>, as application <u>15/692,207</u> (the "Application"). We authorize the insertion of the filing date and application number above.

This Assignment assigns (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region, (b) the right to claim priority based on and the benefit of the filling date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this Assignment.

We will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

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| Daejin CHOI | Date:2011, 3. 3 | - |
|---|--|---|
| Dongjeong KIM | Date: | - |
| Changwoan YANG | Date: | - |
| Donghoon LEE | Date: | - |
| Jinsung KIM | Date: | - |
| Wonsup BAE | Date: | |
| The Assignee hereby acknowledge Assignee: LG ELECTRONICS IN | es and accepts the foregoing assignment. | |
| Signature: | Date: | |
| Name: | | · |

Assignment Page 2 of 2

| Daejin CHOI | Date: | |
|-------------------------------------|--------------------------------------|--|
| Dongjeong KIM | Date: Max. 06. 2017 | |
| Changwoan YANG | Date: | |
| Donghoon LEE | Date: | |
| Jinsung KIM | Date: | |
| Wonsup BAE | Date: | |
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| The Assignee hereby acknowledges at | nd accepts the foregoing assignment. | |
| Assignee: LG ELECTRONICS INC. | | |
| Signature: | Date: | |
| Name: | | |

Assignment Page 2 of 2

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| | Deejin CHOI | Date: |
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| | Dongleong NIM | Dae: |
| | Changwogn YANG | Date: <u>Fish. 8 , 2017</u> |
| | Donghoon LEE | Date: |
| | Jinsung KIM | Date: |
| | Wonsup BAE | Date: |
| | The Assignee hereby acknowledges and | accepts the foregoing assignment. |
| | Assignee: LG ELECTRONICS INC | |
| 2000 2000 2000 2000 2000 2000 2000 200 | Signature | |
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Assignment Page 2 of 2

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PATENT REEL: 045923 FRAME: 0682

| Daejin CHOI | Date: | |
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| Dongjeong KIM | Date: | |
| Changwoan YANG | Date: | |
| Donghoon LEE | Date:01 / 03 / 20/1 | |
| Jinsung KIM | Date: | |
| Wonsup BAE | Date: | |
| The Assignee hereby acknowledge Assignee: LG ELECTRONICS IN | es and accepts the foregoing assignment. | |
| Signature: | | |
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Assignment Page 2 of 2

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| Daéjin CHOI | Date: |
|--|-------|
| Dongjeong KIM | Date: |
| Changwoon YANG | Date: |
| Donghoon LEE | Date: |
| Jinsung KIM | Date: |
| Wonsup BAE | Date: |
| The Assignee hereby acknowledges and Assignee: LG ELECTRONICS INC. | |
| Signature: | Date: |
| Name: | |
| Tirle | |

Assignment Page 2 of 2

| Daejin CHOI | Date: | |
|--------------------------------------|-----------------------------------|--|
| Dagin Choi | | |
| Dongjeong KIM | Date: | |
| Changwoxn YANG | Date: | |
| | Dutos | |
| Donghoon LEE | Date: | |
| Jinsung KIM | Date: | |
| Wonsul BAE | Date: 27 March . 2017 | |
| Wonsu§ BAE | | |
| The Assignee hereby acknowledges and | accepts the foregoing assignment. | |
| Assignee: LG ELECTRONICS INC. | | |
| Signature: | Date: | |
| Name: | | |

Assignment Page 2 of 2

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| Davin (110) |
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| Date: |
| Date: Dongleong KIM |
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| Date: Changwean YANG |
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| Date: |
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| Date: Worsup BAE |
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| The Assignee hereby acknowledges and accepts the foregoing assignment. |
| Assignee: LG ELECTRONICS INC. |
| Signature: 1777 Date: 2019.05.10 |
| Name (Con Tacing - Yours) |
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