503138345 01/15/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3184956

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HYUKJIN AHN	01/08/2015
BYEONGJO RYOO	01/08/2015
YONGJU LEE	01/08/2015

RECEIVING PARTY DATA

Name:	LG ELECTRONICS INC.
Street Address:	128, YEOUI-DAERO, YEONGDEUNGPO-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	150-721

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14597898

CORRESPONDENCE DATA

Fax Number: (703)766-3644

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: 7037663777

Email: assigned@ked-iplaw.com
Correspondent Name: KED & ASSOCIATES, LLP

Address Line 1: P.O. BOX 8638

Address Line 4: RESTON, VIRGINIA 20195

ATTORNEY DOCKET NUMBER:	P-1330
NAME OF SUBMITTER:	DAVID C. OREN
SIGNATURE:	//DAVID C. OREN//
DATE SIGNED:	01/15/2015

Total Attachments: 1

source=p-1330-assign#page1.tif

PATENT 503138345 REEL: 034729 FRAME: 0409

Docket No.: P-1330

ASSIGNMENT

) Hyukjin AHN	(4)
) Byeongjo RYOO	
Yongju LEE	(6)
no have made a certain new and useful invention, hereb	oy sell, assign and transfer unto
	TRONICS INC.
<u>128, Yeour-daer</u> Seoul. 150-721	o, Yeongdeungpo-gu Republic of Korea
	NEE") the entire right, title and interest for the United State
	PARATUS WITH HEAT PUMP
	ent was filed on, and identified by United
for which an application for United States Letters Pat	ent was executed on, and, nited States Commissioner of Patents and Trademarks to issue
tensions, divisions, reissues, substitutes, renewals, con	nted therefor and/or that claim priority thereto and any and al tinuations, or continuations-in-part thereof and/or that claim emational Convention for the Protection of Industrial Property is successors, assigns and legal representatives; the undersigned hereafter act on behalf of said ASSIGNEE;
AND the undersigned hereby agree to transfer	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer any further identification that may be necessare.	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign and title in and to the invention hereby transfer any title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer any further identification that may be necessare.	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute is and legal representatives, deemed essential to ASSIGNEE's insferred. of KED & ASSOCIATES, LLP the power to insert on this try or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document.
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute a and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this cry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute a and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this cry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures:	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this may or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 9, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign a protection and title in and to the invention hereby transport and title in and to the inventi	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute a and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this cry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, papers by the said ASSIGNEE, its successors, assign a protection and title in and to the invention hereby transfer provential protection and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS Hydrin Ah Name: Hyukjin AHN Mame: Byeongjo RYOO	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this may or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 9, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer provention and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS Typic Am Name: Hyukjin Ahn Name: Hyukjin Ahn Name: Byeongjo RYOO	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this may or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 9, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign a protection and title in and to the invention hereby transport and title in and to the inventi	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer provention and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS Typic Am Name: Hyukjin Ahn Name: Hyukjin Ahn Name: Byeongjo RYOO	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, y papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transact	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, a papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transfer provention and title in and to the invention hereby transfer any further identification that may be necessathority, including the United States Patent and Tradema GNED on the dates indicated aside our signatures: INVENTORS Typic Am Name: Hyukjin Ahn Name: Hyukjin Ahn Name: Byeongjo RYOO	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, y papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transact	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon reques epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute as and legal representatives, deemed essential to ASSIGNEE's affected. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015
AND the undersigned hereby agree to transfer plication for and obtaining original, divisional, reissued the said ASSIGNEE, its successors, assigns and legal reprovements, and applications for patent based thereon, y papers by the said ASSIGNEE, its successors, assign protection and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transaction and title in and to the invention hereby transaction and title in and to the invention hereby transaction hereby transact	a like interest, and to render all necessary assistance in making or extended Letters Patent of the United States, upon request epresentatives, and without further remuneration, in and to any growing out of or related to the said invention; and to execute sa and legal representatives, deemed essential to ASSIGNEE's asferred. of KED & ASSOCIATES, LLP the power to insert on this ry or desirable in order to comply with the rules of any issuing rk Office, for recordation of this document. DATE SIGNED Jun. 8, 2015

PATENT REEL: 034729 FRAME: 0410

RECORDED: 01/15/2015