505512317 06/06/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5559122

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEONGKI KIM	05/20/2019
KISEON RYU	06/03/2019
HYUNHEE PARK	06/03/2019
SUHWOOK KIM	05/21/2019
HANGYU CHO	05/20/2019
JINYOUNG CHUN	05/25/2019
JINSOO CHOI	05/20/2019
TAEWON SONG	05/20/2019

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:	16467025

CORRESPONDENCE DATA

Fax Number: (213)623-2211

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: 213-623-2221 Email: patent@lhlaw.com

Correspondent Name: LEE, HONG, DEGERMAN, KANG & WAIMEY
Address Line 1: 660 S. FIGUEROA STREET, SUITE 2300
LOS ANGELES, CALIFORNIA 90017

ATTORNEY DOCKET NUMBER:	2101-71841
NAME OF SUBMITTER:	HARRY S. LEE
SIGNATURE:	/Harry S. Lee/

PATENT 505512317 REEL: 049394 FRAME: 0436

DATE SIGNED:	06/06/2019
Total Attachments: 8	
source=2101-71841_Assignment#page1.tif	
source=2101-71841_Assignment#page2.tif	
source=2101-71841_Assignment#page3.tif	
source=2101-71841_Assignment#page4.tif	
source=2101-71841_Assignment#pages	5.tif
source=2101-71841_Assignment#page@	5.tif
source=2101-71841_Assignment#page7.tif	
source=2101-71841_Assignment#page8	3.tif

PATENT REEL: 049394 FRAME: 0437

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, KIM, Jeongki; RYU, Kiseon; PARK, Hyunhee; KIM, Suhwook; CHO, Hangyu; CHUN, Jinvoung; CHOI, Jinsoo and SONG, Taewon each individually assign to LG Electronics Inc., a corporation formed under the laws of Korea and having a principal place of business at 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 Republic of Korea, 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 "METHOD FOR TRANSMITTING OR RECEIVING WAKE-UP RADIO FRAME IN WIRELESS LAN SYSTEM AND APPARATUS THEREFOR", and was filed in the United States Patent and Trademark Office on ________, as application _______ (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 filing 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.

9/h	Date: <u>2019-05-20</u>
KIM, Jeongki	,
RYU, Kiseon	Date:
PARK, Hyunhee	Date:
Kilm, Suhwook	Date: 2019-05-21
CHO, Hangyu	Date: <u>~ 19, f ~ 10</u>
CHUN, Jinyoung	Date:
CHOI, Jinsoo	Date: 2019, 3.20
SONG, Taewon	Date: 2019, 6.20

ASSIGNMENT

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 filing 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.

KIM, Jeongki	Date:
RYU, Kiseon	Date: 6/3/2019
PARK, Hyunhee	Date:
KIM, Suhwook	Date:
CHO, Hangyu	Date:
CHUN, Jinyoung	Date:
CHOI, Jinsoo	Date:
SONG, Taewon	Date:

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, KIM, Jeongki: RYU, Kiseon: PARK, Hyunhee; KIM, Suhwook; CHO, Hangyu: CHUN, Jinvoung: CHOI, Jinsoo and SONG, Taewon each individually assign to LG Electronics Inc., a corporation formed under the laws of Korea and having a principal place of business at 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 Republic of Korea, 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 "METHOD FOR TRANSMITTING OR RECEIVING WAKE-UP RADIO FRAME IN WIRELESS LAN SYSTEM AND APPARATUS THEREFOR", and was filed in the United States Patent and Trademark Office on _______, as application _______ (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 filing 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.

KIM, Jeongki	Date:
RYU, Kiseon	Date:
PARK, Hyunhee	Date: 03.06.2019
KIM, Suhwook	Date:
CHO, Hangyu	Date:
CHUN, Jinyoung	Date:
CHOI, Jinsoo	Date:
SONG, Taewon	Date:

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, KIM, Jeongki; RYU, Kiseon; PARK, Hyunhee; KIM, Suhwook; CHO, Hangyu; CHUN, Jinyoung; CHOI, Jinsoo and SONG, Taewon each individually assign to LG Electronics Inc., a corporation formed under the laws of Korea and having a principal place of business at 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 Republic of Korea, 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 "METHOD FOR TRANSMITTING OR RECEIVING WAKE-UP RADIO FRAME IN WIRELESS LAN SYSTEM AND APPARATUS THEREFOR", and was filed in the United States Patent and Trademark Office on ________, as application ________ (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 filing 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.

St. H. British	
FDR lengt	Park
Birth Rosent	Dine
PAPK II. Sinhe	Date
tild sament	Dine
CHO Hanger	State Control of the
CHI Sa American	un en en en en en en en en
CHOX Jines	Date
	Date

Comment Page 2 of 2

PATENT

RECORDED: 06/06/2019 REEL: 049394 FRAME: 0445