PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kwangseok NOH	04/10/2020
Bonghoe KIM	03/06/2020
Song-Nam HONG	03/31/2020
Min-Oh JUNG	03/16/2020

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:	16756069

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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Phone: +1 (202) 626-6431

Email: kpk@fr.com, apsi@fr.com

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Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	21613-0362US1
NAME OF SUBMITTER:	KERSTIN KINZER
SIGNATURE:	/Kerstin Kinzer/
DATE SIGNED:	06/03/2020

Total Attachments: 8

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PATENT 506089262 REEL: 052828 FRAME: 0359

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PATENT REEL: 052828 FRAME: 0360

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, NOH, Kwangseok: KIM, Bonghoe: HONG, Song-Nam and JUNG, Min-Oh, each individually assign to LG ELECTRONICS INC., a corporation formed under the laws of Republic 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 "ENCODING METHOD ON BASIS OF POLAR CODE IN ORDER TO SUPPORT HARO. AND WIRELESS DEVICE USING SAME," and was filed in the United States Patent and Trademark Office on April 14, 2020, as application 16/756,069. (the "Application").

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

Assignment Page 1 of 2

PATENT REEL: 052828 FRAME: 0361

3-3	Date:April 10, 2020
NOH, Kwangseok	
KIM, Boughoe	Date:
HONG, Song-Nam	Date:
JUNG, Min-Oh	Date:

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Assignment Page 1 of 2

NOH, Kwangscok	Date:
KIM, Bonghoe	Date: <u>2020 - 3 . 6</u>
HONG, Song-Nam	Date:
JUNG, Min-Oh	Date:

Assignment Page 2 of 2

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Assignment Page 1 of 2

NOH, Kwangseok	Date:
KIM, Bonghoe	Date:
HONG, Song-Nam	Date: March 3, 2020
JUNG, Min-Oh	Date:

Assignment Page 2 of 2

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NOH, Kwangseok	Date:
KIM, Bonghoe	Date:
HONG, Song-Nam	Date:
74019 JUNG, Min-Oh	Date: March . 16 . 2020

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PATENT REEL: 052828 FRAME: 0368