

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
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EPAS ID: PAT6168879

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Seokmin SHIN	10/16/2018
Changhwan PARK	10/17/2018
Seonwook KIM	10/17/2018
Joonkui AHN	10/17/2018
Suckchel YANG	10/16/2018
Seunggye HWANG	10/16/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LG ELECTRONICS INC.
<b>Street Address:</b>	128, YEOUI-DAERO, YEONGDEUNGPO-GU
<b>City:</b>	SEOUL
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	07336
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16897473
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<b>ATTORNEY DOCKET NUMBER:</b>	20211-0259002
<b>NAME OF SUBMITTER:</b>	KERSTIN KINZER
<b>SIGNATURE:</b>	/Kerstin Kinzer/
<b>DATE SIGNED:</b>	06/24/2020

**Total Attachments: 7**

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## ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, SEOKMIN SHIN, CHANGHWAN PARK, SEONWOOK KIM, JOONKUI AHN, SUCKCHEL YANG and SEUNGGYE HWANG, each individually assigns 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 invention(s) (the "Subject Matter") described in a patent application that names us as inventors, is titled "Method and apparatus for transmitting a random access preamble in a narrow band IoT system supporting time division duplexing," and was or will be filed in the United States Patent and Trademark Office on November 14, 2018, as application 16/190,952 (the "Application"). We authorize the insertion of the filing date and application number above.

This Assignment assigns, in addition to the Subject Matter of the Application, (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 and under every treaty or convention, (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.

신석민

Seokmin SHIN

Date: 2018. 10. 16.

Witnessed by:

Signature: \_\_\_\_\_

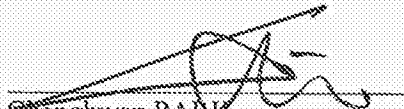
Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

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Changhwan PARK

Date: 20/01/17

Witnessed by:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_



  
Seonwook KIM

Date: 2018. 10. 17

Witnessed by:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

  
\_\_\_\_\_  
Joonkui AHN

Date: 2018.10.17

Witnessed by:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_





Suckchel YANG

Date: 2018.10.16

Witnessed by:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

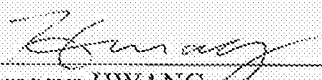
Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Patent Attorney



  
Seunggye HWANG

Date: 2018.10.16

Witnessed by:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

The Assignee hereby acknowledges and accepts the foregoing assignment.

Assignee: LG ELECTRONICS INC.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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