

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT7970757

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Hyun Soo KO	07/06/2011
Seung Hee HAN	07/06/2011
Ja Ho KOO	08/08/2011
Jae Hoon CHUNG	07/06/2011
Bin Chul Ihm	07/06/2011
Moon Il Lee	07/07/2011
<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:	17979292
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(877)769-7945
<i>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.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	21613-0452007
<b>NAME OF SUBMITTER:</b>	MELISSA ANDERSEN
<b>SIGNATURE:</b>	/Melissa Andersen/
<b>DATE SIGNED:</b>	05/24/2023

**Total Attachments: 4**

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**ASSIGNMENT**

- (1-8) *Insert Name(s) of Inventor(s)*
- |                     |                   |
|---------------------|-------------------|
| (1) KO, Hyun Soo    | (5) IHM, Bin Chul |
| (2) HAN, Seung Hee  | (6) LEE, Moon Il  |
| (3) KOO, Ja Ho      | (7)               |
| (4) CHUNG, Jae Hoon | (8)               |

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

- (9) *Insert name of Assignee* (9) LG ELECTRONICS INC.  
 (10) *Insert state of Incorporation of Assignee* (10) Republic of Korea  
 (11) *Insert address of Assignee* (11) 20 Yeouido-dong, Yeoungdeungpo-gu, Seoul 150-721 Republic of Korea

(hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as

- (12) *Insert identification of Invention, such as Title, Case Number or Foreign Application Number* (12) **METHOD AND APPARATUS FOR TRANSMITTING REFERENCE SIGNAL IN MULTI-ANTENNA SYSTEM**

(Application Serial No. 16/774,993 )  
 for which the undersigned has (have) executed an application for patent in the United States of America and all patent applications in foreign countries corresponding thereto or based thereon.

- (13) *Insert Date of Signing of Application* (13) January 28, 2020

1) The undersigned agree(s) to execute all papers necessary in connection with any original, reissue, divisional and continuing United States and foreign applications for the above-identified invention and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

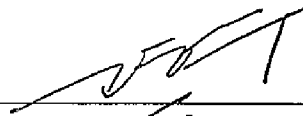
3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed any agreement in conflict herewith. The undersigned hereby appoints **the Attorneys Associated with Customer No. 035884** the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

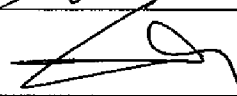
Date: 2011.7.6

Signature of Inventor



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Signature of Inventor

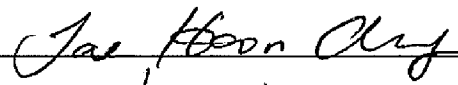


Date: \_\_\_\_\_

Signature of Inventor

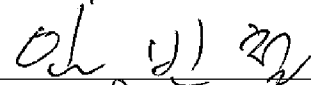
Date: 2011.7.6

Signature of Inventor



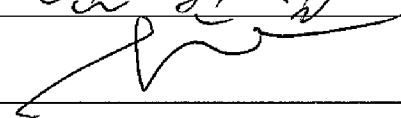
Date: 2011.7.6

Signature of Inventor



Date: 2011.7.7

Signature of Inventor



**ASSIGNMENT**

- |  |                     |                   |
|--|---------------------|-------------------|
| (1-8) <i>Insert Name(s) of Inventor(s)</i> | (1) KO, Hyun Soo    | (5) IHM, Bin Chul |
|  | (2) HAN, Seung Hee  | (6) LEE, Moon Il  |
|  | (3) KOO, Ja Ho      | (7)               |
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Date: \_\_\_\_\_ Signature of Inventor \_\_\_\_\_

Date: \_\_\_\_\_ Signature of Inventor \_\_\_\_\_

Date: 7th Aug 2011 Signature of Inventor 

Date: \_\_\_\_\_ Signature of Inventor \_\_\_\_\_

Date: \_\_\_\_\_ Signature of Inventor \_\_\_\_\_

Date: \_\_\_\_\_ Signature of Inventor \_\_\_\_\_



LG Electronics