

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5508151

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Byeong Moon JEON	04/07/2010
Seung Wook PARK	04/07/2010
Joon Young PARK	04/07/2010
Jae Won SUNG	04/07/2010
Hyun Wook PARK	04/07/2010
Jee Hong LEE	04/07/2010
Jin Young LEE	04/10/2010
Dong San JUN	04/07/2010
Yinji PIAO	04/07/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LG ELECTRONICS INC.
<b>Street Address:</b>	128, YEOUNI-DAERO, YEONGDEUNGPO-GU
<b>City:</b>	SEOUL
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	150-721
<b>Name:</b>	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY
<b>Street Address:</b>	373-1, GUSUNG-DONG, YUSEONG-KU
<b>City:</b>	DAEJEON
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	305-701
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16389037
<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>	
<b>Phone:</b>	+1 (202) 626-6431
<b>Email:</b>	stadnick@fr.com

**Correspondent Name:** WON S. YOON  
**Address Line 1:** FISH & RICHARDSON P.C.  
**Address Line 2:** P.O.BOX 1022  
**Address Line 4:** MINNEAPOLIS, MINNESOTA 55440-1022

**ATTORNEY DOCKET NUMBER:** 19819-0302008

**NAME OF SUBMITTER:** SHANNON STADNICK

**SIGNATURE:** /Shannon Stadnick/

**DATE SIGNED:** 05/06/2019

**Total Attachments: 4**

source=Executed Assignment#page1.tif

source=Executed Assignment#page2.tif

source=Executed Assignment#page3.tif

source=Executed Assignment#page4.tif

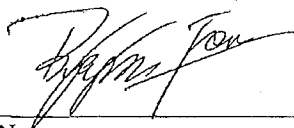
ASSIGNMENT

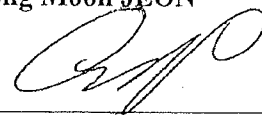
For valuable consideration, we, Byeong Moon JEON of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Seung Wook PARK of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Joon Young PARK of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Jae Won SUNG of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Hyun Wook PARK of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Jee Hong LEE of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Jin Young LEE of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Dong San JUN of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea and Yinji PIAO of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, hereby assign to:

LG ELECTRONICS INC., a corporation of KOREA having a place of business at 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-721 Korea; and


KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY, a corporation of KOREA having a place of business at Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, and their successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled A METHOD AND AN APPARATUS FOR PROCESSING A VIDEO SIGNAL, filed June 10, 2013, and assigned U.S. Serial Number 13/914,106, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignees to apply in all countries in our name or in its own name for patents, utility models,

design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignees may reasonably request to effectuate fully this assignment.

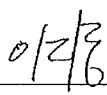
  
Byeong Moon JEON \_\_\_\_\_ DATE \_\_\_\_\_  
April 7, 2010

  
Seung Wook PARK \_\_\_\_\_ DATE \_\_\_\_\_  
April 7, 2010

  
Joon Young PARK \_\_\_\_\_ DATE \_\_\_\_\_  
April 7, 2010

  
Jae Won SUNG \_\_\_\_\_ DATE \_\_\_\_\_  
April 7, 2010

Hyun Wook PARK \_\_\_\_\_ DATE \_\_\_\_\_

  
Jee Hong LEE \_\_\_\_\_ DATE \_\_\_\_\_  
4. 7. 2010.

Jin Young LEE \_\_\_\_\_ DATE \_\_\_\_\_

Dong San JUN \_\_\_\_\_ DATE \_\_\_\_\_

Yinji PIAO \_\_\_\_\_ DATE \_\_\_\_\_

## ASSIGNMENT

For valuable consideration, we, Byeong Moon JEON of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Seung Wook PARK of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Joon Young PARK of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Jae Won SUNG of LG Electronics Inc. IP Group 16, Woomyeon-dong, Seocho-gu, Seoul 137-724, Republic of Korea, Hyun Wook PARK of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Jee Hong LEE of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Jin Young LEE of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, Dong San JUN of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea and Yinji PIAO of Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, hereby assign to:

LG ELECTRONICS INC., a corporation of KOREA having a place of business at 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-721 Korea; and

KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY, a corporation of KOREA having a place of business at Dept. of EE, KAIST, Guseong-dong, Yusong-gu, Daejeon 305-701, Republic of Korea, and their successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled A METHOD AND AN APPARATUS FOR PROCESSING A VIDEO SIGNAL, filed June 10, 2013, and assigned U.S. Serial Number 13/914,106, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignees to apply in all countries in our name or in its own name for patents, utility models,

design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignees may reasonably request to effectuate fully this assignment.

Byeong Moon JEON

DATE

Seung Wook PARK


DATE

Joon Young PARK

DATE

Jae Won SUNG

DATE

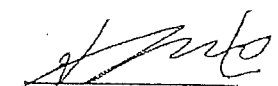
  
Hyun Wook PARK

DATE

April 2, 2010

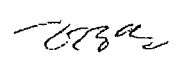
Jee Hong LEE

DATE

  
Jih Young LEE

DATE

April 10, 2010

  
Dong San JUN

DATE

2010. 4. 9

  
Yinji PIAO

DATE

April 7, 2010