# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3874432

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
SUNG BONG CHO	05/12/2016
SUNG HOON LEE	05/12/2016
SEOK HO CHAE	05/12/2016
HYO JIN KIM	05/12/2016

### **RECEIVING PARTY DATA**

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City:	CHANGWON-SI		
State/Country:	KOREA, REPUBLIC OF		

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15036945

### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	Q226856
NAME OF SUBMITTER:	CHRIS SOUTHCOTT
SIGNATURE:	/Chris Southcott/
DATE SIGNED:	05/16/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).

### **Total Attachments: 6**

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PATENT 503827783 REEL: 038605 FRAME: 0409

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PATENT REEL: 038605 FRAME: 0410

Docket No.: Q226856 Only After Sept 16, 2012 US Rights Only

# ASSIGNMENT WITH DECLARATION FOR PATENT APPLICATION (37 CFR 1.63)

# 특허 출원 관련 양도 및 선언(연방규칙집 제 37 조 1.63 항)

## Korean Language Assignment with Declaration

이하 양도인으로 지칭되는 하기 서명 발명자인 본인(들)은 아래에 명시된출원에서서술한특정개선을 발명하였으므로그리고	Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and
에 소재한 (양수인)는(은) 출원 및 발명의 그리고 이에 따라 획득될 알체의 미국 특허에 대한 모든 권리, 소유권 및 이권을 획득하기를 원하므로,	Whereas, <u>Hanwha Techwin Co., Ltd. of 1204</u> , <u>Changwon-daero Seongsan-gu</u> , <u>Changwon-si</u> , <u>Gyeongsangnam-do</u> , <u>Republic of Korea</u> , (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;
이제대가를위한그수령을인정합니다.	Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,
상기 양도인인 본인(들)은 상기 명칭의 양수인, 그 승계자 및 그 양수인에게모든분할과그면속을 포함하여 미국용으로 공개된출원과 발명그리고그에 대해 승인될수 있는 미국의모든 특허증서와 미합중국 코드 제 35 장 제§119 항에 의거한 우선권 청구권과 과거의 손해에 대한 소송권을 포함한 모든 그 재발행에 대한 전체 권리, 소유권 및 이권을 판매, 양도 및 이전하며 그리고 본인(들)은 출원서에 제시된 발명에 대해 승인된 일체의 특허증서를 양수인, 그 승계자 또는 그 양수인에게 발급하도록 미국 특허청장에게 요청하는 바이며 또한 본인(들)은 양수인의 요청할 경우 미국 출원과 관련하여 양수인이 필요하다고 생각하는모든서류를 더 이상의보수없이서명날인할 것입니다.	I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the inventior disclosed therein for the United States of America, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof including the right to claim priority under 35 USC 119 and the right to sue for past damages, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.
(공인은 기록을 위해 요구되지는 않지만 미합중국 코드 제 35 장 제\$251 항에 의거서명날인에 대한일응의 증거입니다)	(Legalization not required for recording but is prima facie evidence of execution under 35 USC 261)
본인은 아래 성명의 발명자로서 다음과 같이 선언합니다.	As the below named inventor, I hereby declare that:
본 양도 및 선언서는 다음 사항을 위한 것입니다:	This assignment with declaration is directed to:
□ 첨부출원또는	The attached application, or
□ 미항증국출완또는PCT 국제출원번호: 출원일:	United States Application or PCT International Application Number PCT/KR2014/002484 filed on March 25, 2014.
본 출원의 제목은 다음과 같습니다.	The application is entitled:
	IMAGE PROCESSING APPARATUS AND METHOD

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PATENT TREEL: 038605 FRAME: 0411

#### Korean Language Assignment with Declaration

위에 표시된 출원은 본인이 신청하였거나 또는 신청하도록 허가를 받았습니다.

본인은, 본인이 본 출원에서 청구된 발명의 원 발명자 또는 원 공동 발명자라고믿습니다.

본인은 본 양도 및 선언서 제출과 관련된 출원의 내용을 검토하였으며 아울리 이해합니다.

본인은 연방 규정 코드 제 37 장 제 156 항에 규정된 바에 따라, 특허성의 판단에 중요한본인이 아는 모든 정보를 특허청에 공개할 의무가 있음을 알고 있습니다.

본 양도 및 선언서 내에 의도적 허위 진술이 있을 경우 미합중국 코드 제 18장의 1001 항에 의거 벌금이나 5년 이하의 징역 또는 두 가지 처벌을 모두받을 수 있을을 인정합니다. The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

# STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):

The assignment with declaration is an accurate translation of the corresponding English language assignment with declaration.

age (17) to the co

Signature

Date

March 17, 2014

PATENT

REEL: 038605 FRAME: 0412

NAME OF SOLE OR F 设备 基金 筹金 营留等			
Given Name (first and mi 이용(설립는 제기)	227480		risine CHO
Inventor's signature 발명자의 시역			Date 및자 May 12 2016
Residence: 기주적: Chang	won-si, Republic of Korea		
Mailing Address: c/o Hanwha Techwin Co., Ltd., 1204, Changwon-daero, Scongsan-gu, Changwon-si, Gyeongsangnam-do, Republic of Korea			
NAME OF SECOND IN 두인제 방법자의 설명	VENTOR:		
Given Name (first and mi 이용(설립는 제외)	ddle (if any)) Sung Hoon	Pamily Name or Suri 참(差)	LEE-
Inventor's signature क्षेत्र्यं में भे भ			Date:
Residence: 거추격: Chang	won-si, Republic of Korea		
Mailing Address: c/o Hanwha Techwin Co., Ltd., 1204, Chang won-daero, Scong san-gu, Chang won-si, Gyeong sangnam-do, Republic of Korea			
NAME OF THIRD INV 세련적 방명자의 설명	ENTOR:		
Given Name (first and mi 이름(영화는 제외)	ddle (if sny)) Seok Ho	Panily Name or Sur 含(纯)	name CHAE
Inventor's signature 왔당자의 사명			Date 일자
Residence: 기주자: Chanş	gwon-si, Republic of Koren		
	/o Hanwha Techwin Co., Ltd., 1204, Changwi epublic of Korea	on-dæro, Seongsan-gu,	Changwon-si, Gyeongsangnam-do,
NAME OF FOURTH 19	NVENTOR:		
Given Name (first and mi 이품(정의는 제외)	ddle (if any)) Hyo Jin	Pamily Name or Sur 含(姓)	name KIM
श्री-वीक्षेत्रका क्षेत्र Inventor's signature	74-2-		Date शु:१३ - May 12, 2518
Residence: 光平적: Changwon-si, Republic of Korea			
Mailing Address: c/o Hanwha Techwin Co., Ltd., 1204, Changwon-daero, Seongsan-gu, Changwon-si, Gyeongsanguani-do, Republic of Korea			

PATENT

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**REEL: 038605 FRAME: 0413** 

Doc code: Oath

Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)

Approved for use through 01/31/2014. OMB 0651-0032

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# SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	IMAGE PROCESSING APF	PARATUS AND MET	ГНОD
This statem	ent is directed to:		
The att	ached application,		
OR			
United	States application or PCT international	application number	filed on
LEGAL NA	ME of inventor to whom this su	bstitute statement appl	illes:
` *	Name (first and middle (if any)) and F	amily Name or Surname)	
Seok H	o CHAE		
Residence (	except for a deceased or legally incapa	acitated inventor):	
<sub>city</sub> Cha	ingwon-si	State	Republic of Korea
Mailing Address (except for a deceased or legally incapacitated inventor): Hanwha Techwin Co. Ltd. 1204, Changwon-daero, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Republic of Korea			
<sub>city</sub> Cha	ıngwon-si	Staie	Republic of Korea
	above-named inventor or joint inventor plication.	or to be the original inventor	or or an original joint inventor of a claimed invention
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationsh	ip to the inventor to whom this substitu	ite statement applies:	
Legal Representative (for deceased or legally incapacitated inventor only),			
Assignee,			
Person to whom the inventor is under an obligation to assign,			
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
Je	oint Inventor.		

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This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTC-9199 and select option 2.

# SUBSTITUTE STATEMENT

***************************************	***************************************			
Circumstances permitting execution of this sub	stitute statement:			
Inventor is deceased,				
Inventor is under legal incapacity,	Inventor is under legal incopacity,			
Inventor cannot be found or reached a	Inventor cannot be found or reached after diligent effort, or			
Inventor has refused to execute the path or declaration under 37 CFR 1.53.				
If there are joint inventors, please check the ap	ppropriate box below:			
An application data sheet under 37 Coor is currently submitted	An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.			
OR				
Statement Supplemental Sheet (PTO	An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).			
	WARNING:			
Patitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO of support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, settitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application request in compilance with 37 CFR 1.213(a) is made in the application) or issuance of a valent. Furthermore, the record from an abandoned application may also be available to the public if the application is efferenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card, authorization forms are publication to the application is a published application or an issued patent (see 37 CFR 1.14). Checks and credit card, authorization forms				
ERSON EXECUTING THIS SUBSTITUTE STA	ATEMENT:	***************************************	***************************************	
Min Suk SUNG			Date (Optional).	
Signature:				
APPLICANT NAME AND TITLE OF PERSON I	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
I the applicant is a juristic entity, list the applican Hanwha Techwin Co		ser.		
Applicant Name:	Zey Bullet.			
Title of Person Executing This Substitute Statement: Patent Manager of Hanwha Techwin Co., Ltd.				
The signer, whose title is supplied above, is aut Residence of the signer (unless provided in			ent):	
Changwon-si	State	Country Reput	olic of Korea	
Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)				
Hanwha Techwin Co. Ltd. 1204, Changwon-daero, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Republic of Korea				
<sub>city</sub> Changwon-si	State	Zip	Republic of Korea	
Note: Use an additional PTO/AIA/02 form for ea			annot be found or reached	

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### Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant ( i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT REEL: 038605 FRAME: 0416

RECORDED: 05/16/2016