504933453 05/29/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4980199

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HEE KANG	04/10/2018
YOUNG-JUN SONG	04/17/2018
DONG-KI MIN	04/10/2018
JONG-MIN YOU	04/10/2018
JEE-HONG LEE	04/13/2018
SEOK-JAE KANG	04/10/2018
TAEK-SUN KIM	04/10/2018
JOON-HYUK IM	04/10/2018

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15984692

CORRESPONDENCE DATA

Fax Number: (703)757-7447

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.

Phone: 7037577880

Email: pto@muirpatentlaw.com

Correspondent Name: MUIR PATENT LAW, PLLC

Address Line 1: P.O. BOX 1213

Address Line 4: GREAT FALLS, VIRGINIA 22066

ATTORNEY DOCKET NUMBER:	SAM-56109
NAME OF SUBMITTER:	ALYSA N. YOUNGSON
SIGNATURE:	/Alysa N. Youngson/

PATENT 504933453 REEL: 045912 FRAME: 0847

DATE SIGNED:	05/29/2018
Total Attachments: 5	
source=SAM-56109_Executed_Oath_D	ec#page1.tif
source=SAM-56109_Executed_Oath_D	ec#page2.tif
source=SAM-56109_Executed_Oath_D	ec#page3.tif
source=SAM-56109_Executed_Oath_D	ec#page4.tif
source=SAM-56109_Executed_Oath_D	ec#page5.tif

PATENT REEL: 045912 FRAME: 0848

COMBINED DECLARATION (37 CFR § 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM¹

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR § 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to individually and collectively as Assignor, has invented:

Title: IMAGE SIGNAL PROCESSOR, IMAGE PROCESSING SYSTEM AND METHOD OF BINNING PIXELS IN AN IMAGE SENSOR
for which Assignor is about to make or has made United States or International application for patent.
WHEREAS, as a below named inventor(s), I/(we) hereby declare that:
Section I. Declaration
This declaration is directed to:
The attached U.S. non-provisional patent application, or
U.S. non-provisional patent application number
or PCT international patent application number filed on
The above-identified application was made or authorized to be made by me (us).
Sensor和最初的以下,15015879 I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application.
I (we) hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.
I (we) hereby state that I (we) have reviewed and understand the contents of the above identified application, including the claims.
I (we) acknowledge that I (we) am (are) aware of the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.
This form requires the use of an Application Data Sheet.
SEC Ref No. IB-201708-016-1-USO Attorney Ref No. SAM-56109 (CY5033US)

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

Section II. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to

Samsung Electronics Co., Ltd.

having an address at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Republic of Korea (hereinafter designated as the Assignee), the entire (100%) right, title and interest for the United States as defined in 35 U.S.C. § 100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

SEC Ref No.	IB-201708-016-1-US0	Attorney Ref No.	5AM-56109 (CY5033US)
	(44444444444444444444444444444444444444		

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

The undersigned hereby grant(s) the law firm of Muir Patent Law, PLLC the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Section III. Inventor(s)/Assignor(s) Signature(s)

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIRST INVENTOR/ASSIGNOR	KANG	Hee	
		<u> </u>	
SIGNATURE	Kong Hou	DATE	<u> 2018 . 4 . 10 </u>

LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	SONG	Young-Jun	
	Sensor제품개발팀(S.I.S	D/3:21/15015879	
SIGNATURE	Young Jun	DATE	2018, 4, 17

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD - INVENTOR/ASSIGNOR	MIN	Dong-Ki	
SIGNATURE	Muss	DATE	2018 4.10

SEC Ref No. ______ IB-201708-016-1-USO _____ Attorney Ref No. ____ SAM-56109 (CY5033US)

OU .	Jong-Min	
	3	
eri:		
	DATE	2018-4-10
2	? 242/	DATE

LEGAL NAME OF	Family Name	First Given Name	Second Given Name	
FIFTH INVENTOR/ASSIGNOR	LEE	Jee-Hong		
		.		
	e de la companya della companya della companya de la companya della companya dell			
SIGNATURE		DATE	2.618 ,4, 13	

Sensor和看得質量(S.f.Si)/设值/15015879

LEGAL NAME OF	Family Name	First Given Name	Second Given Name	
SIXTH INVENTOR/ASSIGNOR	KANG	Seok-Jae		
SIGNATURE	44	DATE	208 . 4, 10	

SEC Ref No. IB-201708-016-1-US0 Attorney Ref No. SAM-56109 (CY5033US)

LEGAL NAME OF SEVENTH	Family Name	First Given Name	Second Given Name	
INVENTOR/ASSIGNOR	KIM	Taek-Sun		
		···k]	
SIGNATURE		_ DATE	2018 - 4. to	
	<u> </u>			

LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	Family Name	First Given Name Joon-Hyuk	Second Given Name	
		×	·.d	
SIGNATURE _		DATE .	11.4.4	10

Sensor제를개발됨(SLSI)/강희/15015879

SEC Ref No. 18-201708-016-1-USO Attorney Ref No. SAM-56109 (CY5033US)

RECORDED: 05/29/2018