503362326 06/23/2015

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YONG SUN KIM	02/10/2015
BYONG MIN KANG	03/31/2015
DO KYOON KIM	03/31/2015
KEE CHANG LEE	03/31/2015

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, SUWON-SI
City:	GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	443-742

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13467457

CORRESPONDENCE DATA

Fax Number:

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.

Email: JSMITH@HDP.COM

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C.

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ATTORNEY DOCKET NUMBER:	9587SI-000139-US
NAME OF SUBMITTER:	JOHN A. CASTELLANO, REG. NO. 35, 094
SIGNATURE:	/John A. Castellano/
DATE SIGNED:	06/23/2015

Total Attachments: 6

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> **PATENT** REEL: 035959 FRAME: 0945 503362326

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PATENT REEL: 035959 FRAME: 0946

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

IMAGE FILTERING APPARATUS AND METHOD BASED ON NOISE PREDICTION USING INFRARED RAY (IR) INTENSITY

for which Assignor is about to make or has made United States or International application for patent

(a) executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);

(b) executed on , , , or

(c) filed on May 9, 2012, and assigned Serial No. 13/467,457

WHEREAS, Samsung Electronics Co., Ltd, 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy whereof is hereby acknowledged, 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.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. 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 U.S. Patent and Trademark Office for recordation of this document.

YONG SUN KIM
Yong Sun KIM
Feb. 10, 2015
Dated
Byong Min KANG
Dated
Do Kyoon KIM
Dated
Kee Chang LEE
Dated

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

IMAGE FILTERING APPARATUS AND METHOD BASED ON NOISE PREDICTION USING INFRARED RAY (IR) INTENSITY

for which Assignor is about to make or has made United States or International application for patent executed on even date preparatory to filing (each inventor should sign (a) this Assignment on the same day as he/she signs the Declaration and Power of Attorney); executed on _____, ____; or (b) filed on May 9, 2012, and assigned Serial No. 13/467,457

 \boxtimes

(c)

WHEREAS, Samsung Electronics Co., Ltd, 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, hereinafter referred to as Assignee, is desirous of acquiring all right, title, and interest therein:

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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;

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Page 1 of 2

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Yong Sun KIM
Dated
-22-12-A
Byong Min KANG
March 31, 2015
Dated
Do Kyoon KIM
DO KYDOH KIM
Dated
2 A
Oma6
Kee Chang LEE
March 31, 2015
Dated

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

IMAGE FILTERING APPARATUS AND METHOD BASED ON NOISE PREDICTION USING INFRARED RAY (IR) INTENSITY

for whice patent	h Assi	gnor is	about to make or has made United States or International application for
	(a)		executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration and Power of Attorney);
	(b)		executed on,; or
	(c)	\boxtimes	filed on May 9, 2012, and assigned Serial No. 13/467,457

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Yong Sun KIM	
Dated	
Byong Min KANG	
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Dated	
Job Mri	
Do Kyoon KIM	
31, March, 2015	
Dated	
Vac Chara LET	
Kee Chang LEE	
Dated	

Page 2 of 2

RECORDED: 06/23/2015