PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Seung hyun LIM	06/18/2010
Jeong hwan LEE	06/16/2010
Kun hee CHO	06/16/2010
Gun Hee HAN	06/18/2010
Kwi Sung YOO	06/18/2010
Seog heon HAM	06/18/2010

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	416, Maetan-dong, Yeongtong-gu
City:	Suwon-si, Gyeonggi-do
State/Country:	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
Postal Code:	442-742

Name:	INDUSTRY-ACADEMIC COOPERATION FOUNDATION
Street Address:	Yonsei Univ., 134, Sinchon-dong Seodaemun-gu
City:	Seoul
State/Country:	REPUBLIC OF KOREA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12828478

CORRESPONDENCE DATA

Fax Number: (571)283-0740

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 5712830720

Email: rbennett@volentine.com

Correspondent Name: Stephen R. Whitt

PATENT 501222933 REEL: 024631 FRAME: 0309

12828478

Address Line 1: Volentine & Whitt, PLLC Address Line 2: 111951 Freedom Drive, Suite 1260 Reston, VIRGINIA 20190 Address Line 4: ATTORNEY DOCKET NUMBER: SEC.2790 NAME OF SUBMITTER: Stephen R. Whitt **Total Attachments: 5** source=SEC2790_Assignment#page1.tif source=SEC2790_Assignment#page2.tif source=SEC2790_Assignment#page3.tif source=SEC2790_Assignment#page4.tif source=SEC2790_Assignment#page5.tif

> PATENT REEL: 024631 FRAME: 0310

ASSIGNMENT

Insert	In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned
Name(s) of Inventor(s)	1. Seung hyun LIM 7.
• • • • • • • • • • • • • • • • • • • •	2. Jeong hwan LEE 8.
	3. Kun hee CHO 9.
	4. Gun Hee HAN 10.
	5. Kwi Sung Yoo 11.
	o. <u>Seed hear haw</u>
Insert Name(s) of	the undersigned hereby sell(s) and assign(s) to
Assignee(s) &	SAMSUNG ELECTRONICS CO., LTD.
Address(es)	416, Maetan-dong, Yeongtong-gu, of Suwon-si, Gyeonggi-do 442-742, Republic of Korea
• •	and
	WIAM.
	INDUSTRY-ACADEMIC COOPERATION FOUNDATION
	ionsei Univ., 134. Sinchen-dong
	of Seodaemun-gu, Seoul, Republic of Korea
Fitle of Invention	(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as CMOS IMAGE SENSOR AND IMAGE SIGNAL DETECTING METHOD
Date of	for which an application for patent in the United States of America has been executed by
Signing of Application	the undersigned on June 16 and June 18, 2010
· ·	The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.
	The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuing. division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
	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.

Page 1 of 2

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The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> 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 Office for recordation of this document.

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 or reissue 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, and will not execute, any agreement in conflict herewith.

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.

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			Gun Hee HAN
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Date 20/	06.18	_ Signature of Inventor	25 1/3 76
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(Note	regarding Witne	ssing: It is recommended	that the execution by the Inventor(s) be
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Date	Signature of Inventor	•
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Date 2010 6	// Signature of Inventor	Jeonghwon Lee
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Date	Signature of Inventor	Kun hee CHO
		Kun hee CHO
Date	Signature of Inventor	Gun Hee HAN
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Date	Signature of Inventor	Kwi Sung YOO
Date	Signature of Inventor	Seog heon HAM
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VOLENTINE & WHITT, I	P.L.L.C.	(01/2007)
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ATTORNEY DOCKET NO. <u>SEC.2790</u>

The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> 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 Office for recordation of this document.

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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.

Date Signature of Inventor Date Signature of Inventor Date Signature of Inventor Signature of Inventor Gun Hee HAN Date Signature of Inventor End Sung You Date Signature of Inventor End Sung You (Note regarding Witnessing: It is recommended that the execution by the Inventor(s) be witnessed by at least two witnesses who sign here. However, the current practice of the U.S. Patent and Trademark Office is to record an Assignment even it has not been witnessed.) Witness— Witness— Witness— Witness— Second HAN Second HAN Witness— Witness— Witness— Witness— Witness— Witness— Signature of Inventor Aun Hee HAN End Han End Han Witness— Witness— Witness— Witness— Witness— Witness— Witness— Witn	Date _		Signature of Inventor	
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ATTORNEY DOCKET NO. SEC. 27911

The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> 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 Office for recordation of this document.

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

	Signature of Inventor	Soung binin LZN
		Soung ayun 12M
Date	Signature of Inventor	Jacob itaan Lee
Date	Signature of Inventor	Run has cho
Date June 18,201	O Signature of Inventor	Gunhes MAN
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RECORDED: 07/02/2010