## PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Dae-Sung Cho	09/28/2011
Woong-II Choi	09/28/2011
Kwan-Woong Sung	10/04/2011
Young-Hun Joo	09/28/2011
Yong-Serk Kim	10/04/2011
Dong-Gyu Sim	09/15/2011
Jung-Hak Nam	09/15/2011
Sea-Nae Park	09/15/2011
Kwang-Su Jung	09/15/2011

### **RECEIVING PARTY DATA**

Name:	Samsung Electronics Co., Ltd.
Street Address:	416, Maetan-dong, Yeongtong-gu
Internal Address:	Gyeonggi-do
City:	Suwon-si
State/Country:	REPUBLIC OF KOREA

Name:	Kwangwoon University Industry-Academic Collaboration Foundation	
Street Address:	447-1, Wolgye-dong	
Internal Address:	Nowon-gu	
City:	Seoul	
State/Country:	REPUBLIC OF KOREA	

## PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	13146764	

### CORRESPONDENCE DATA

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Email: sughrue@sughrue.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: SUGHRUE MION, PLLC

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Address Line 2: SUITE 800

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20037

ATTORNEY DOCKET NUMBER: Q125101

NAME OF SUBMITTER: Kailie MacKeverican; Patent Specialist

Total Attachments: 6

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## Assignment

Whenes We Dee Cone CHO CC 1 P 11' CV W W CYCOL C
Whereas, We, Dae-Sung CHO of Seoul, Republic of Korea; Woong-Il CHOI of
Hwaseong-si, Republic of Korea; Kwan-Woong SONG of Seongnam-si, Republic of Korea;
Young-Hun JOO of Yongin-si, Republic of Korea; Yong-Serk KIM of Seoul, Republic of Kore
Dong-Gyu SIM of Seoul, Republic of Korea; Jung-Hak NAM of Seoul, Republic of Korea; Se
Nae PARK of Seoul, Republic of Korea; and Kwang-Su JUNG of Yeongdong-gun, Republic o
Korea, hereinafter called assignors, have invented certain improvements in METHOD AND
APPARATUS FOR ENCODING AND DECODING IMAGES BY ADAPTIVELY USING A
INTERPOLATION FILTER and executed an application for Letters Patent of the United State
of America therefor on; and

Whereas, SAMSUNG ELECTRONICS CO., LTD. of 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 442-742, Republic of Korea, and KWANGWOON UNIVERSITY INDUSTRY-ACADEMIC COLLABORATION FOUNDATION of 447-1, Wolgye-dong, Nowon-gu, Seoul, 139-701, Republic of Korea, (assignees), desire to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignees, its successors and assigns, the entire right, title and interest in the application and the invention 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 U.S.C. §119, and 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 assignees, its successors and assigns; and we will execute without further consideration all papers deemed necessary by the assignees in connection with the United States application when called upon to do so by the assignees.

We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/146,764 and Confirmation number 7039 filed July 28, 2011) the application number and filing date of said application when known.

Date:	2011, Sept, 28 Journs	
	s/Dae-Sung CHO	_
Date:	2011, Sept. 28 / May 9	
	s/Woong-Il CHOI	
Date:		
	s/Kwan-Woong SONG	2000
Date:	2011, Sept, 28 3 with	
	s/Young-Hun IOO	

Date:		
	s/Yong-Serk KIM	
Date:		
	s/Dong-Gyu SIM	
Date:		
	s/Jung-Hak NAM	
Date:		
	s/Sea-Nae PARK	
Date:		
	s/Kwang-Su JUNG	

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

Ass	ignment
Hwaseong-si, Republic of Korea; Kwan-Woo Young-Hun JOO of Yongin-si, Republic of K Dong-Gyu SIM of Seoul, Republic of Korea; Nae PARK of Seoul, Republic of Korea; and Korea, hereinafter called assignors, have inve APPARATUS FOR ENCODING AND DEC	ul, Republic of Korea; Woong-Il CHOI of ong SONG of Seongnam-si, Republic of Korea; Korea; Yong-Serk KIM of Seoul, Republic of Korea; Jung-Hak NAM of Seoul, Republic of Korea; Sea-Kwang-Su JUNG of Yeongdong-gun, Republic of ented certain improvements in METHOD AND CODING IMAGES BY ADAPTIVELY USING AN application for Letters Patent of the United States; and
Suwon-si, Gyeonggi-do, 442-742, Republic of INDUSTRY-ACADEMIC COLLABORATI Nowon-gu, Seoul, 139-701, Republic of Kor	CS CO., LTD. of 416, Maetan-dong, Yeongtong-gu, of Korea, and KWANGWOON UNIVERSITY CON FOUNDATION of 447-1, Wolgye-dong, ea, (assignees), desire to acquire the entire right, ation, and to any United States patents to be obtained
Now therefore, for valuable consider	ation, receipt whereof is hereby acknowledged,
We the above named assignors, here	by sell, assign and transfer to the above named

We, the above named assignors, hereby sell, assign and transfer to the above named assignees, its successors and assigns, the entire right, title and interest in the application and the invention 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 U.S.C. §119, and 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 assignees, its successors and assigns; and we will execute without further consideration all papers deemed necessary by the assignees in connection with the United States application when called upon to do so by the assignees.

We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/146,764 and Confirmation number 7039 filed July 28, 2011) the application number and filing date of said application when known.

Date:				_
		s/Dae-Sung CHO	·	
Date:				
		s/Woong-Il CHOI		
Date:	2011-10-4	lang K.W.		
		s/Kwan-Woong SONG		
Date:				
		s/Young-Hun JOO		

Date: 2011-10-4	
	s/Yong-Serk KIM
Date:	
	s/Dong-Gyu SIM
Date:	
	s/Jung-Hak NAM
Date:	
	s/Sea-Nae PARK
Date:	
	s/Kwang-Su JUNG

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

# **Assignment**

Whereas, We, Dae-Sung CHO of Seoul, Republic of Korea; Woong-Il CHOI of Hwaseong-si, Republic of Korea; Kwan-Woong SONG of Seongnam-si, Republic of Korea; Young-Hun JOO of Yongin-si, Republic of Korea; Yong-Serk KIM of Seoul, Republic of Korea; Dong-Gyu SIM of Seoul, Republic of Korea; Jung-Hak NAM of Seoul, Republic of Korea; Sea-Nae PARK of Seoul, Republic of Korea; and Kwang-Su JUNG of Yeongdong-gun, Republic of Korea, hereinafter called assignors, have invented certain improvements in METHOD AND APPARATUS FOR ENCODING AND DECODING IMAGES BY ADAPTIVELY USING AN INTERPOLATION FILTER and executed an application for Letters Patent of the United States of America therefor on \_\_\_\_\_\_\_\_\_; and

Whereas, SAMSUNG ELECTRONICS CO., LTD. of 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 442-742, Republic of Korea, and KWANGWOON UNIVERSITY INDUSTRY-ACADEMIC COLLABORATION FOUNDATION of 447-1, Wolgye-dong, Nowon-gu, Seoul, 139-701, Republic of Korea, (assignees), desire to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignees, its successors and assigns, the entire right, title and interest in the application and the invention 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 U.S.C. §119, and 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 assignees, its successors and assigns; and we will execute without further consideration all papers deemed necessary by the assignees in connection with the United States application when called upon to do so by the assignees.

We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/146,764 and Confirmation number 7039 filed July 28, 2011) the application number and filing date of said application when known.

Date:		
	s/Dae-Sung CHO	
Date:		
<del> </del>	s/Woong-Il CHOI	
Date:		
<u></u>	s/Kwan-Woong SONG	
Date:		
	s/Young-Hun JOO	

Date:		
	s/ Yong-Serk KIM	
Date:	20/1 - 9-15 s/ Dong-Gyu SIM	<del></del>
	2011 - 9-15 Jung-hak Lbon. s/ Jung-Hak NAM	
	2011 - 9 - 15  S/ Sea-Nae PARK	
Date:	2011 -9-15 MSL27	

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

PATENT REEL: 027041 FRAME: 0452

**RECORDED: 10/11/2011**