8	Customer Service Window Mail Stop Assignment Recordation Services Randolph Building 401 Dulany Street Alexandria, VA 22314	U.S. PTO 12/461455 08/12/2009		Atty. Docket No.: 2557SI-001314/US Page 1 of		
	, F	08-20-2	M MARINE LIMBOR CON ARTIC	SHEET		
2	To the Please	1035716	18 21121 11222 1117 1221	d Trademarks:		
	1. Name of conveying party(ies):			address of receiving		
	Eun-hyoung CHO		Name: Samsung Electronics Co., Ltd.			
	Jin-seung SOHN				an-dong, Yeongtong-gu	
	Seock-hwan KANG		City: Suwon-si State: Gyeonggi-do			
	Hae-sung KIM		Country:	Country: Republic of Korea		
	Additional name(s) of conveying party(is  YES NO  Nature of conveyance:		Additions	al name(s) & address(	es) attached? 🗌 YES 🛛 NO	
	Execution Date: July 23, 2009, July 20, 2009, July 2009,	1241	0.14.5			
	If this document is being filed together v 200  A. Patent Application No(s).	9, July 23, 2009, Jul		July 23, 2009		
	Additional numbers attached?   YES   NO					
	5. Name and address of party to whom concerning document should be mail				tents involved: One (1)	
	Name: HARNESS, DICKEY & PIER		7. Total fee (37 C.F.R. § 3.41): \$40.00  ⊠ Enclosed			
	Street Address: P.O. BOX 8910	•				
	City: RESTON State: VA ZIP: 2	State: VA ZIP: 20195		Authorized to be charged to deposit account, if no fee attached.		
	Country: USA		8. Deposit account number: 08-0750			
					copy of this page eposit account)	
		DO NOT US	E THIS SPACE	E	•	
	9. Statement and signature.  To the best of my knowledge are copy of the original document.	nd belief, the foregoing i	information is t	rue and correct an	d any attached copy is a true	
	John A. Castellano, Reg. No. 35,094 Name of Person Signing/Reg. No.		Signature		August 12, 2009 Date	
	Total numb	er of pages including co	ver sheet, attac	hments, and docum	nent: 3	
		\	/	98/13/2009 CHCHYD	JAC/ma	
				91 FC:8021	49.09 OP	

PATENT REEL: 023127 FRAME: 0659

## ASSIGNMENT

Atty. Dkt. No. 2557SI-001314/US

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

## PHOTONIC CRYSTAL OPTICAL FILTER, REFLECTIVE COLOR FILTER, DISPLAY APPARATUS USING THE REFLECTIVE COLOR FILTER, AND METHOD OF MANUFACTURING THE REFLECTIVE COLOR FILTER

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 to Assignment on the same day as he/she signs the Declaration and Povof Attorney);		
(b)		executed on,; or		
(c)		filed on, and assigned Serial No or PCT International Application No; and		

WHEREAS, Samsung Electronics Co., Ltd., 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 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 agrees to, 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 Parls Convention, and any foreign countries, to the invention as described in the aforesaid application and all United States Letters Patent which may be granted therefore, and all divisions, continuations, reissues, reexaminations and extensions thereof, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent 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 or patents resulting therefrom;

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 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 Inventor's Certificate 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.

Page 1 of 2

## **ASSIGNMENT**

Atty. Dkt. No. 2557\$1-001314/US

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Eun-hyoung CHO
July 22, 2009 Dated
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SUM SOUND SOUND
July 23, 2.9 Dated
Seock-hwan KANG
July 22, 2009
Dated
- Sal-t-F
Hae-sung KIM
July 23, 209
Dated
THE POOL
Xianyu WENXU
T 14 22 2009

Dated

RECORDED: 08/12/2009

**REEL: 023127 FRAME: 0661**