01/29/2013 FORM PTO-1595 U.S. DEPARTMENT OF COMMERCE JAN 2 5 2013 🔀 Patent and Trademark Office 103654561 To the Honorable Commissioner Paten d original documents or copy thereof. 1. Name of conveying party (ies): 2. Name and address of receiving party(ies): 1) Hye-Jin Jung 2) Seok-Hwan Hwang SAMSUNG DISPLAY CO., LTD., 3) Young-Kook Kim 4) Jin-O Lim a corporation chartered in and existing under the laws of 5) Sang-Hyun Han 6) Jong-Hyuk Lee the Republic of Korea Additional name(s) of conveying party(ies) attached? □ Yes ■No 95, Samsung 2 Ro, Giheung-Gu 3. Nature of conveyance Yongin-City, Gyeonggi-Do **KOREA** Assignment □ Merger Additional name(s) & addresses attached? □ Yes □ Security Agreement □ Change of Name □ Other Execution Date: 14 August 2012 4. Application number(s) or Patent number(s): If this document is being filed together with a new application, the execution of the application is: A. Patent Application No(s). B. Patent No(s). 13/414,534 Additional number(s) attached? - Yes 5. Name and address of party to whom correspondence 6. Total Number of applications and patents involved: ONE concerning document should be mailed: Name: Robert E. Bushnell Attorney at Law ■ Enclosed (Check #9231) 2029 "K" Street, N.W. Suite 600 Authorized to be charged to deposit account Washington, D.C. 20006-1004 8. Deposit Account Number: (202) 408-9040 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and Signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. ROBERT E. BUSHNELL 17 January 2013 01/31/2013 LMARTIN 00000032 13414534 Name of Person Signing Total number of pages including cover sheet: 40.00 OP OMB No. 0651-0011 (exp. 4/94) Do not detach this portion Mail documents to be recorded with the required cover sheet information to: **Commissioner of Patents and Trademarks Box Assignments** Alexandria, VA 22313-1450

REB/mb (Attorney's Docket No.: P59648)

PATENT REEL: 029772 FRAME: 0550

ASSIGNMENT (Page 1 of 2)

Docket No. <u>P59648</u>

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that:
IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged. I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE:

SAMSUNG DISPLAY CO., LTD.,

a corporation chartered in and existing under the laws of the Republic of Korea 95, Samsung 2 Ro, Giheung-Gu Yongin-City, Gyunggi-Do, KOREA

Who is my Assignee, and to the successors and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

TITLE: HETEROCYCLIC COMPOUND, ORGANIC LIGHT-EMITTING DIODE INCLUDING THE HETEROCYCLIC COMPOUND, AND FLAT DISPLAY DEVICE INCLUDING THE ORGANIC LIGHT-EMITTING DIODE

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment, or is more particularly identified as:

	ecuted on even date h		in the U.S. Patent &	c Trademark Office on 7 Ma	arch 2012	10,
	ecuted on					
and in continu	and to all United pations, reissued and and enjoyed by said terms or any experience.	States patents were-examined patents Damsung Description or renevo	which may be grant ents, and to any exterisplay Co., Lto val thereof, for whice	ed thereon and therefore, and nsions thereof, said interest be d ., my Assignee, its successor h said patent or patents may be onveyance had not been made:	ing the entire ownership of rs, assigns or other legal re	the patent when granted, to presentatives, to the full end
application any	ments which may fro ation or in the prepara amendment, extensions with the right of no	m time-to-time bation and prosecu on, or interference	e either necessary, letion of all substitute e proceeding, wheth international Conven-	ate, without receiving any mo lawful, proper or requested by applications, certificate of cor- ter administrative or judicial, on the protection of Indu- nal agreement or treaty to whice	the Assignce, in the prose rection, division, continual r otherwise, to secure the t strial Property, Inter-Amer	countion of the above-named tion, reissue, re-examination, itle hereto in said Assignee, ican Convention Relating to
hereby identifi	AND I do hereby	authorize and re our attorney, an e such identificat	equest the Commiss id authorize and rection which may be ei	ioner of Patent & Trademarks quest R. E. Bushnell, Reg. N ther necessary or desirable in o	to issue said Patent or Pa	tents to the Assignee, and I
	IN WITNESS WI	HEREOF, I and v	ve have set our hand	s and seals on the dates writter	beside my and our respec	tive names:
		TOR(s)		Date Signed	Witness(es)	
1)	Hye-Jin JU	Jung	(Sca!)	14 August 2012		
,	Hye-Jin JU	NG				
2)	Sock-Huan	HWANG	(Seal)	14 August 2012		
	Seok-Hwar	1 HWANG				
■ Ad	dditional inventors	are being name	ed on separately nu	imbered sheets attached her	eto.	

PATENT REEL: 029772 FRAME: 0551

ASSIGNMENT (Page 2 of 2)

Docket No. <u>P59648</u>

	INVENTOR(s)		Date Signed	Witness(es)
3) _	Young-kook KIM Young-Kook KIM	(Seal)	14 August 2012	
4)	Jin - O LIM Jin-O LIM	(Seal)	14 August 2012	
5)	Sang - Hun HAN Sang-Hyun HAN	(Scal)	14 August 2012	
6) _	Jong -Hyuk LEE Jong-Hyuk LEE	(Seal)	14 August 2012	

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RECORDED: 01/25/2013