



(11) **EP 2 328 196 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
26.10.2011 Bulletin 2011/43

(51) Int Cl.:
H01L 51/52 (2006.01)

(43) Date of publication A2:
01.06.2011 Bulletin 2011/22

(21) Application number: **10192499.1**

(22) Date of filing: **25.11.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(72) Inventors:
• **Bae, Sung-Jin**
Gyunggi-Do (KR)
• **Lee, Kyung-Jun**
Gyunggi-Do (KR)

(30) Priority: **25.11.2009 KR 20090114802**

(74) Representative: **Gulde Hengelhaupt Ziebig & Schneider**
Patentanwälte - Rechtsanwälte
Wallstrasse 58/59
10179 Berlin (DE)

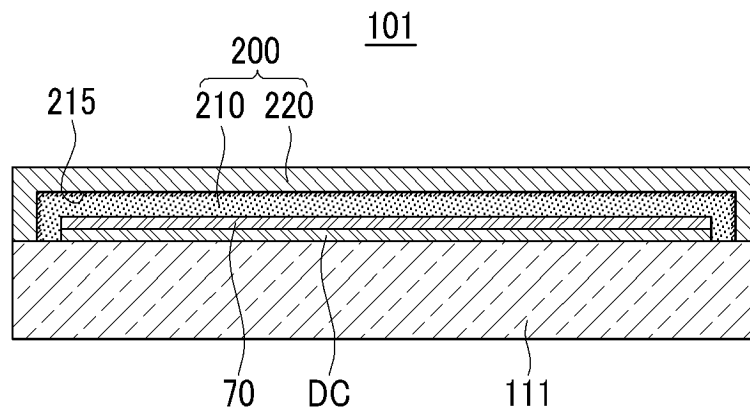
(71) Applicant: **Samsung Mobile Display Co., Ltd.**
Yongin-city, Gyunggi-do 446-711 (KR)

(54) **Organic light emitting diode display and method of manufacturing the same**

(57) The present invention relates to an organic light emitting diode (OLED) display and a method of manufacturing the same. According to one embodiment of the invention, the OLED display includes: a substrate main body; an OLED that is formed on the substrate main body; and an encapsulation thin film comprising or consisting

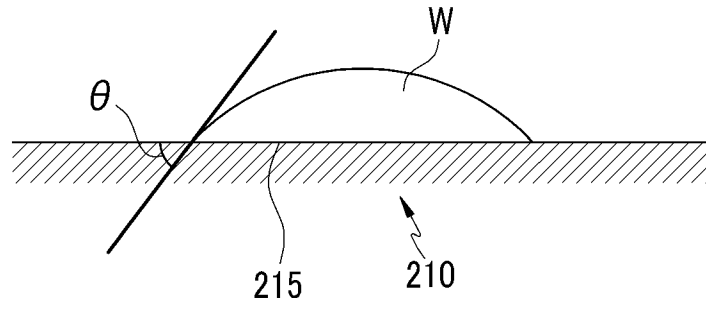
of a hydrophilic polymer layer that is formed on the substrate main body to cover the OLED and that includes a hydrophilic surface having an angle of contact within a range of larger than 0° and smaller than or equal to 50°; and an inorganic protective layer that is formed on the hydrophilic surface of the hydrophilic polymer layer.

FIG.1



EP 2 328 196 A3

FIG.2





EUROPEAN SEARCH REPORT

Application Number
EP 10 19 2499

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2009/215279 A1 (KIM JAI KYEONG [KR] ET AL) 27 August 2009 (2009-08-27) * paragraph [0002] - paragraph [0010] * * paragraph [0024] - paragraph [0061] * * figure 3 *	1-15	INV. H01L51/52
A	US 2006/088951 A1 (HAYASHI KENJI [JP] ET AL) 27 April 2006 (2006-04-27) * paragraph [0157] - paragraph [0170] * * figures 4-5 *	1	
A	WO 2009/086337 A1 (DU PONT [US]; HSU CHE-HSIUNG [US]; GAO WEIYING [US]) 9 July 2009 (2009-07-09) * pages 19,20 * * pages 30,39 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			H01L
Place of search		Date of completion of the search	Examiner
Munich		13 September 2011	Bernabé Prieto, A
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

1
EPO FORM 1503 03/02 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 10 19 2499

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-09-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009215279 A1	27-08-2009	KR 20090091556 A	28-08-2009

US 2006088951 A1	27-04-2006	CN 1764335 A	26-04-2006
		JP 4329740 B2	09-09-2009
		JP 2006147528 A	08-06-2006
		KR 20060054035 A	22-05-2006
		KR 20070079333 A	06-08-2007
		US 2009050883 A1	26-02-2009
		US 2010171147 A1	08-07-2010

WO 2009086337 A1	09-07-2009	EP 2232527 A1	29-09-2010
		JP 2011510484 A	31-03-2011
		KR 20100114052 A	22-10-2010
		US 2011114925 A1	19-05-2011

专利名称(译)	有机发光二极管显示器及其制造方法		
公开(公告)号	EP2328196A3	公开(公告)日	2011-10-26
申请号	EP2010192499	申请日	2010-11-25
[标]申请(专利权)人(译)	三星显示有限公司		
申请(专利权)人(译)	三星移动显示器有限公司.		
当前申请(专利权)人(译)	三星移动显示器有限公司.		
[标]发明人	BAE SUNG JIN LEE KYUNG JUN		
发明人	BAE, SUNG-JIN LEE, KYUNG-JUN		
IPC分类号	H01L51/52		
CPC分类号	H01L51/5253 H01L27/3244		
优先权	1020090114802 2009-11-25 KR		
其他公开文献	EP2328196A2		
外部链接	Espacenet		

摘要(译)

有机发光二极管 (OLED) 显示器及其制造方法本发明涉及有机发光二极管 (OLED) 显示器及其制造方法。根据本发明的一个实施例, OLED显示器包括: 基板主体; OLED, 形成在基板主体上; 包封或由亲水聚合物层组成的包封薄膜, 所述亲水聚合物层形成在所述基底主体上以覆盖所述 OLED, 并且包括亲水表面, 所述亲水表面具有在大于 0° 且小于或等于 0° 的范围内的接触角。 50° ; 和在亲水聚合物层的亲水表面上形成的无机保护层。

FIG.1

