



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
05.06.2013 Bulletin 2013/23

(51) Int Cl.:
H01L 27/32 (2006.01) H01L 51/52 (2006.01)

(43) Date of publication A2:
05.12.2012 Bulletin 2012/49

(21) Application number: **12154001.7**

(22) Date of filing: **06.02.2012**

(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

(30) Priority: **02.06.2011 KR 20110053375**

(71) Applicant: **Samsung Display Co., Ltd.**
Yongin-City, Gyeonggi-Do, 446-711 (KR)

(72) Inventors:
• **Chung, Jin-Koo**
Gyeonggi-Do 446-711 (KR)
• **Choi, Jun-Ho**
Gyeonggi-Do 446-711 (KR)
• **Kim, Seong-Min**
Gyeonggi-Do 446-711 (KR)

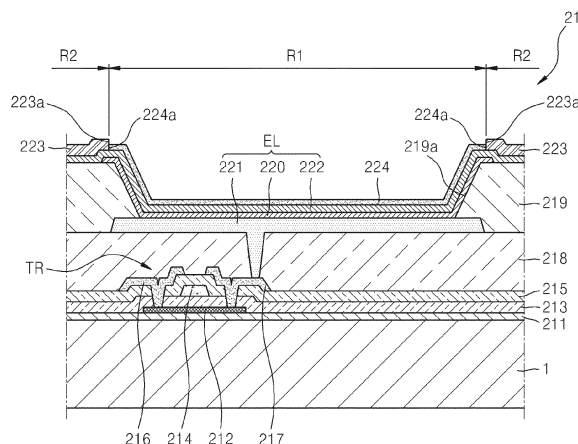
(74) Representative: **Walaski, Jan Filip et al**
Venner Shipley LLP
200 Aldersgate
London
EC1A 4HD (GB)

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

(57) An organic light emitting display device and a method of manufacturing the same. The organic light emitting display device includes a substrate, a thin film transistor (TFT) formed on the substrate, a first insulating layer covering the TFT, a first electrode formed on the first insulating layer and electrically connected to the TFT, a second insulating layer that is formed on the first insulating layer so as to cover the first electrode and has an opening to expose a portion of the first electrode, an or-

ganic layer formed on a portion of the second insulating layer and the first electrode, a second electrode that is formed on the second insulating layer and the organic layer and that is composed of a first region and a second region, a capping layer formed on a first region of the second electrode and having first edges, and a third electrode formed on a second region of the second electrode and having second edges whose side surfaces contact side surfaces of the first edges of the capping layer.

FIG. 3





EUROPEAN SEARCH REPORT

Application Number
EP 12 15 4001

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 2008/197778 A1 (KUBOTA TAKEHIKO [JP]) 21 August 2008 (2008-08-21) * paragraph [0080] - paragraph [0084]; figure 9 *	1-13	INV. H01L27/32 H01L51/52
X	EP 1 722 425 A2 (LG ELECTRONICS INC [KR]) LG DISPLAY CO LTD [KR]) 15 November 2006 (2006-11-15) * paragraph [0066] - paragraph [0108]; figure 5 *	1-13	
X	JP 2007 157374 A (SEIKO EPSON CORP) 21 June 2007 (2007-06-21) * figures 3,4 *	1-13	
X	WO 2008/032845 A1 (CANON KK [JP]; YOSHINAGA HIDEKI [JP]) 20 March 2008 (2008-03-20) * figure 1A *	1-13	
A	JP 2007 165215 A (SEIKO EPSON CORP) 28 June 2007 (2007-06-28) * figure 5 *	10-13	TECHNICAL FIELDS SEARCHED (IPC) H01L
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 2 May 2013	Examiner 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			

 2
EPO FORM 1503 03.82 (P04C01)

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

EP 12 15 4001

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.

02-05-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008197778 A1	21-08-2008	NONE	
EP 1722425 A2	15-11-2006	EP 1722425 A2	15-11-2006
		JP 2006318910 A	24-11-2006
		US 2006255726 A1	16-11-2006
		US 2010127273 A1	27-05-2010
JP 2007157374 A	21-06-2007	JP 4736757 B2	27-07-2011
		JP 2007157374 A	21-06-2007
WO 2008032845 A1	20-03-2008	JP 2008098148 A	24-04-2008
		US 2010078627 A1	01-04-2010
		WO 2008032845 A1	20-03-2008
JP 2007165215 A	28-06-2007	NONE	

专利名称(译)	有机发光显示装置及其制造方法		
公开(公告)号	EP2530717A3	公开(公告)日	2013-06-05
申请号	EP2012154001	申请日	2012-02-06
[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DISPLAY CO. , LTD.		
当前申请(专利权)人(译)	三星DISPLAY CO. , LTD.		
[标]发明人	CHUNG JIN KOO CHOI JUN HO KIM SEONG MIN		
发明人	CHUNG, JIN-KOO CHOI, JUN-HO KIM, SEONG-MIN		
IPC分类号	H01L27/32 H01L51/52		
优先权	1020110053375 2011-06-02 KR		
其他公开文献	EP2530717A2		
外部链接	Espacenet		

摘要(译)

有机发光显示装置及其制造方法。有机发光显示装置包括基板，形成在基板上的薄膜晶体管（TFT），覆盖TFT的第一绝缘层，形成在第一绝缘层上并电连接到TFT的第一电极，第二绝缘层形成在第一绝缘层上以覆盖第一电极并具有暴露第一电极的一部分的开口，形成在第二绝缘层和第一电极的一部分上的有机层，第二电极形成在第二绝缘层和有机层上并且由第一区域和第二区域组成，覆盖层形成在第二电极的第一区域上并具有第一边缘，第三电极形成在第二区域上第二电极具有第二边缘，第二边缘的侧表面接触覆盖层的第一边缘的侧表面。

FIG. 3

