(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 2 731 155 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
04.05.2016 Bulletin 2016/18

(43) Date of publication A2:
14.05.2014 Bulletin 2014/20

(21) Application number: **13171634.2**

(22) Date of filing: **12.06.2013**

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

(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: **12.11.2012 KR 20120127506**

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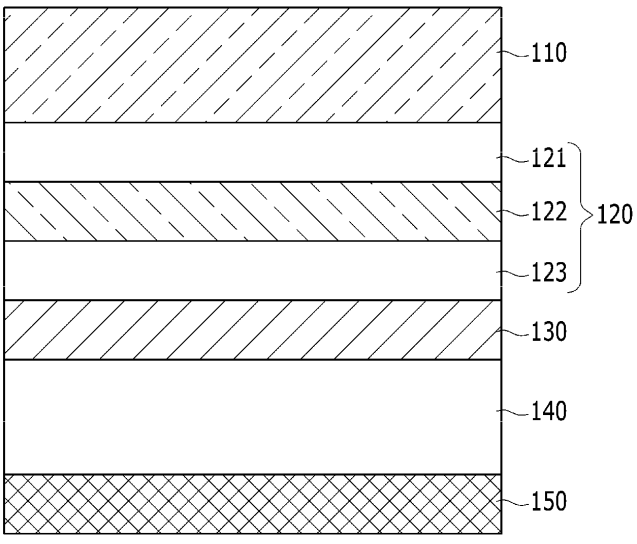
(54) Flexible display device and manufacturing method of the same

(57) A flexible display device includes: a display panel (120) including a display substrate (123), an organic light emitting element (122) formed on the display substrate, and a thin film encapsulation layer (121) covering the organic light emitting element; a first insulation layer (130) formed under the display panel; a lower protection film (140) formed under the first insulation layer; and a reinforcement layer (150) formed under the lower protection film, between the lower protection film and the first insulation layer, or on the display panel, wherein the reinforcement layer is configured to prevent damage to the display panel due to bending stress.

FIG. 1



EP 2 731 155 A3

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EUROPEAN SEARCH REPORT

Application Number
EP 13 17 1634

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 2012/100647 A1 (KIM SEUNG-HUN [KR] ET AL) 26 April 2012 (2012-04-26) * abstract; figures 1-13 * * paragraph [0039] - paragraph [0095] *	1-13	INV. H01L51/52 ADD. H01L27/32
X	US 2007/059854 A1 (HUANG CHIN-JEN [TW] ET AL) 15 March 2007 (2007-03-15) * abstract; figures 1A,1B,2A,2B * * paragraph [0032] - paragraph [0045] *	1-13	
A	US 2012/228601 A1 (HIYAMA KUNIMASA [JP] ET AL) 13 September 2012 (2012-09-13) * abstract; figure 1 * * paragraph [0026] * * paragraph [0078] - paragraph [0085] *	1-13	
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A	US 2012/107978 A1 (SHIN ARAM [KR] ET AL) 3 May 2012 (2012-05-03) * abstract; figures 1A-3K * * paragraph [0005] - paragraph [0053] *	1-13	
A	US 2011/147747 A1 (JEON HYUNG-IL [KR] ET AL) 23 June 2011 (2011-06-23) * abstract; figures 3C,5F *	1-13	

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Berlin	24 March 2016	Ernst, Monika

CATEGORY OF CITED DOCUMENTS

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EPO FORM 1503 03.82 (P04C01)

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EUROPEAN SEARCH REPORT

Application Number
EP 13 17 1634

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Berlin	24 March 2016	Ernst, Monika

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

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24-03-2016

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	柔性显示装置及其制造方法		
公开(公告)号	EP2731155A3	公开(公告)日	2016-05-04
申请号	EP2013171634	申请日	2013-06-12
[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	KIM HYUN CHEL		
发明人	KIM, HYUN-CHEL		
IPC分类号	H01L51/52 H01L27/32		
CPC分类号	H01L51/56 H01L27/3244 H01L51/5237 H01L51/5253 H01L51/5256 H01L2227/326 H01L2251/5338		
优先权	1020120127506 2012-11-12 KR		
其他公开文献	EP2731155A2		
外部链接	Espacenet		

摘要(译)

一种柔性显示装置，包括：显示面板（120），包括显示基板（123），形成在显示基板上的有机发光元件（122），以及覆盖有机发光元件的薄膜封装层（121）;形成在显示面板下方的第一绝缘层（130）;形成在第一绝缘层下面的下保护膜（140）;加强层（150）形成在下保护膜下方，下保护膜和第一绝缘层之间，或显示面板上，其中加强层构造成防止由于弯曲应力而损坏显示面板。

FIG. 1