(19) Europäisches Patentamt
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(11) **EP 2 159 843 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
01.05.2013 Bulletin 2013/18

(43) Date of publication A2:
03.03.2010 Bulletin 2010/09

(21) Application number: **09010980.2**

(22) Date of filing: **27.08.2009**

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

(84) Designated Contracting States:
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 SE SI SK SM TR
Designated Extension States:
AL BA RS

(30) Priority: **29.08.2008 JP 2008221881**

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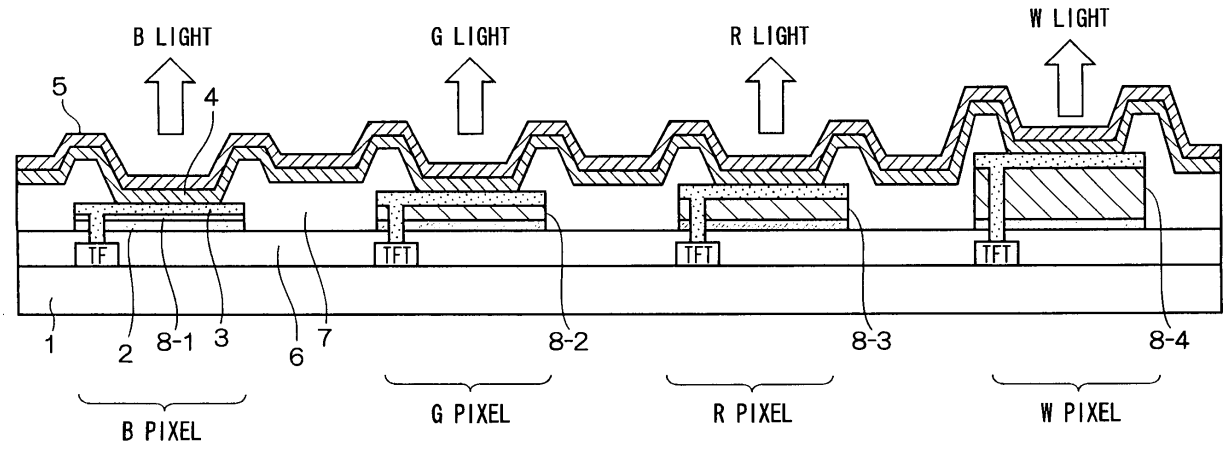
(54) **Color display device and method for manufacturing the same**

(57) Disclosed is a color display device containing plural pixels on a substrate, each pixel is composed of plural sub-pixels which emit lights different in wavelength in the visible range and a white sub-pixel, the plural sub-pixels and the white sub-pixel each have a white organic electroluminescence layer interposed between an optically semitransparent reflection layer and a light reflection layer, the optical distance between the optically semitransparent reflection layer and the light reflection layer in each of the plural sub-pixels forms a resonator having a distance for resonating emitted light, and the optical distance between the optically semitransparent reflection layer and the light reflection layer in the white sub-pixel is longer than the maximum optical distance between the optically semitransparent reflection layer and the light reflection layer in each of the plural sub-pixels.

FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 09 01 0980

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 Y	WO 2005/101541 A1 (EASTMAN KODAK CO [US]; BOROSON MICHAEL LOUIS [US]; WINTERS DUSTIN LEE) 27 October 2005 (2005-10-27) * page 7, line 17 - page 13, line 13; figure 3 *	1-6,10, 11 7-9,12, 13	INV. H01L27/32 H01L51/52
Y	US 2006/290274 A1 (OOTA MASUYUKI [JP]) 28 December 2006 (2006-12-28) * paragraph [0058] - paragraph [0062]; figure 2 *	7-9,12, 13	
Y	US 2007/286944 A1 (YOKOYAMA MEISO [JP] ET AL) 13 December 2007 (2007-12-13) * paragraph [0039]; figure 4 *	1-13	
Y	JP 2007 141789 A (SANYO ELECTRIC CO) 7 June 2007 (2007-06-07) * abstract; figure 4 *	1-13	
Y	US 2005/040756 A1 (WINTERS DUSTIN [US] ET AL) 24 February 2005 (2005-02-24) * figure 2 *	1-13	TECHNICAL FIELDS SEARCHED (IPC) H01L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	25 March 2013	Bernabé Prieto, A

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)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 09 01 0980

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25-03-2013

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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)	彩色显示装置及其制造方法		
公开(公告)号	EP2159843A3	公开(公告)日	2013-05-01
申请号	EP2009010980	申请日	2009-08-27
[标]申请(专利权)人(译)	富士胶片株式会社		
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当前申请(专利权)人(译)	UDC IRELAND LIMITED		
[标]发明人	KINOSHITA MASARU		
发明人	KINOSHITA, MASARU		
IPC分类号	H01L27/32 H01L51/52		
CPC分类号	H01L27/3213 H01L51/5265		
优先权	2008221881 2008-08-29 JP		
其他公开文献	EP2159843A2 EP2159843B1		
外部链接	Espacenet		

摘要(译)

公开了一种在基板上包含多个像素的彩色显示装置，每个像素由发射可见光范围内波长不同的光的多个子像素和白色子像素，多个子像素和白色子像素组成每个在光学半透明反射层和光反射层之间插入白色有机电致发光层，在多个子像素的每个中，光学半透明反射层和光反射层之间的光学距离形成具有共振距离的谐振器发光，并且白色子像素中的光学半透明反射层与光反射层之间的光学距离长于多个子像素中的每一个中的光学半透明反射层与光反射层之间的最大光学距离。