



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
17.08.2011 Bulletin 2011/33

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

(43) Date of publication A2:
21.01.2009 Bulletin 2009/04

(21) Application number: **08159490.5**

(22) Date of filing: **02.07.2008**

(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 MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(71) Applicant: **CANON KABUSHIKI KAISHA**
Ohta-ku
Tokyo 146-8501 (JP)

(72) Inventor: **Fukuda, Koichi**
Tokyo Tokyo 146-8501 (JP)

(30) Priority: **19.07.2007 JP 2007187820**

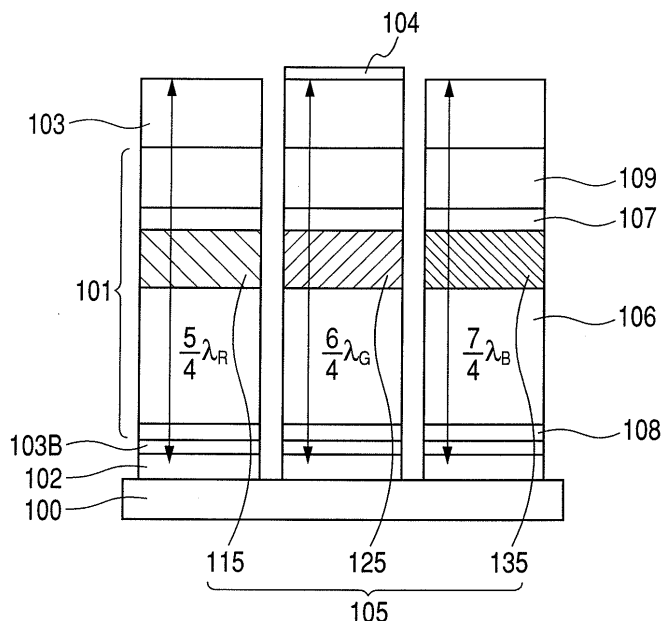
(74) Representative: **TBK**
Bavariaring 4-6
80336 München (DE)

(54) **Display apparatus**

(57) Provided is a display apparatus, in which: among a red light emitting device, a green light emitting device, and a blue light emitting device, one or two of the organic light emitting devices include a metal translucent layer (104) on a side closer to a second electrode (103) with respect to an emission layer (125) and a second reflection surface includes a surface of the metal translucent

cent layer (104) on a side of the emission layer (125); and the rest of the organic light emitting devices include a low-refractive index layer (air) having a lower refractive index than the second electrode (103) on the side closer to the second electrode (103) with respect to the emission layer (115,135) and the second reflection surface includes a surface of the low-refractive index layer (air) on the side of the emission layer (115,135).

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 08 15 9490

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 2005/067954 A1 (NISHIKAWA RYUJI [JP] ET AL) 31 March 2005 (2005-03-31) * paragraphs [0026] - [0028], [0032], [0033], [0043] - [0049]; figure 4 *	1-7	INV. H01L51/52
X	US 2005/269947 A1 (KOBAYASHI HIDEKAZU [JP]) 8 December 2005 (2005-12-08) * paragraphs [0049] - [0079]; figure 3 *	1,6,7	
A	US 2006/158103 A1 (KATANO JUNICHI [JP] ET AL) 20 July 2006 (2006-07-20) * paragraphs [0053] - [0060], [0066] - [0079]; figure 3 *	1-7	
			TECHNICAL FIELDS SEARCHED (IPC)
			H01L H05B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 July 2011	Examiner Bakos, Tamás
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 03.82 (P04C01)

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

EP 08 15 9490

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.

08-07-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005067954 A1	31-03-2005	CN 1604703 A	06-04-2005
		JP 4428979 B2	10-03-2010
		JP 2005108737 A	21-04-2005
		KR 20050031955 A	06-04-2005
		TW 1242389 B	21-10-2005

US 2005269947 A1	08-12-2005	KR 20060047610 A	18-05-2006
		US 2009230858 A1	17-09-2009

US 2006158103 A1	20-07-2006	CN 1977568 A	06-06-2007
		EP 1768467 A1	28-03-2007
		WO 2006008987 A1	26-01-2006
		KR 20070044432 A	27-04-2007

专利名称(译)	显示装置		
公开(公告)号	EP2017907A3	公开(公告)日	2011-08-17
申请号	EP2008159490	申请日	2008-07-02
[标]申请(专利权)人(译)	佳能株式会社		
申请(专利权)人(译)	佳能株式会社		
当前申请(专利权)人(译)	佳能株式会社		
[标]发明人	FUKUDA KOICHI		
发明人	FUKUDA, KOICHI		
IPC分类号	H01L51/52		
CPC分类号	H01L51/5265 H01L27/3211		
代理机构(译)	TBK		
优先权	2007187820 2007-07-19 JP		
其他公开文献	EP2017907A2		
外部链接	Espacenet		

摘要(译)

提供一种显示装置，其中：在红色发光装置，绿色发光装置和蓝色发光装置中，一个或两个有机发光装置包括在靠近第二个的一侧上的金属半透明层。相对于发光层和第二反射表面的电极包括在发光层一侧的金属半透明层的表面；其余的有机发光器件包括相对于发光层在较靠近第二电极的一侧具有比第二电极低的折射率的低折射率层，并且第二反射表面包括低的表面 - 发射层一侧的折射率层。

