



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
09.04.2008 Bulletin 2008/15

(51) Int Cl.:
H01L 51/00 (2006.01)

(43) Date of publication A2:
02.01.2004 Bulletin 2004/01

(21) Application number: **03076858.4**

(22) Date of filing: **16.06.2003**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR
Designated Extension States:
AL LT LV MK

• **Tang, Manh,**
c/o Eastman Kodak Company
Rochester,
New York 14650-2201 (US)

(30) Priority: **27.06.2002 US 184417**

(71) Applicant: **Eastman Kodak Company**
Rochester, New York 14650 (US)

(74) Representative: **Weber, Etienne Nicolas et al**
Kodak Industrie
Département Brevets - CRT
Zone Industrielle
71102 Chalon sur Saône Cedex (FR)

(72) Inventors:
• **Rivers, Andrea S.,**
c/o Eastman Kodak Company
Rochester,
New York 14650-2201 (US)

(54) **Depositing an emissive layer for use in an organic light-emitting display device (oled)**

(57) A method for depositing an OLED emissive layer, includes: providing an OLED substrate having at least one discernible feature; providing a beam of light which is transversely and angularly movable; providing an unpatterned donor element including emissive material and having an energy absorbing layer, arranged so that when the donor element is properly positioned relative to the OLED substrate, the beam of light can be absorbed by the energy-absorbing layer to heat the emissive material and cause its transfer; detecting the location of the discernible feature on the OLED substrate relative to the position of the beam to determine the position and orientation of the OLED substrate relative to the beam; angularly moving the beam and then moving the beam in a raster fashion, in accordance with the detected position and orientation of the OLED substrate, and changing the timing of actuation of the light beam as it is moved to different transverse positions.

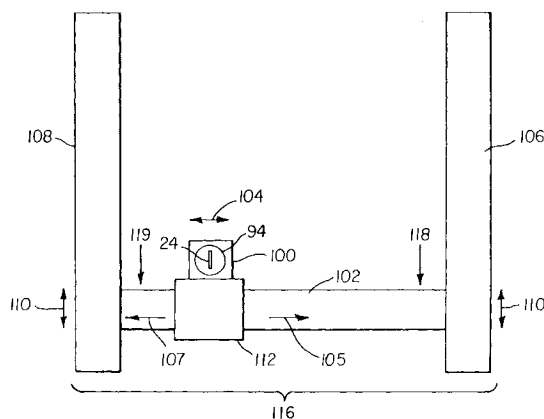


FIG. 5



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 03 07 6858

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 5 851 709 A (GRANDE WILLIAM J [US] ET AL) 22 December 1998 (1998-12-22) * the whole document *	1,6-8	INV. H01L51/00
A	WO 00/14777 A (FED CORP [US]) 16 March 2000 (2000-03-16) * the whole document *	1,6-8	
A	US 5 937 272 A (TANG CHING W [US]) 10 August 1999 (1999-08-10) * the whole document *	1,6-8	
			TECHNICAL FIELDS SEARCHED (IPC)
			H01L
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 4 March 2008	Examiner Wolfbauer, Georg
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 03 07 6858

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.

04-03-2008

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5851709	A	22-12-1998	EP	0913870 A2	06-05-1999
			JP	11237504 A	31-08-1999

WO 0014777	A	16-03-2000	EP	1116260 A1	18-07-2001

US 5937272	A	10-08-1999	EP	0883190 A2	09-12-1998
			JP	11054275 A	26-02-1999

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)	沉积用于有机发光显示装置的发光层 (oled)		
公开(公告)号	EP1376715A3	公开(公告)日	2008-04-09
申请号	EP2003076858	申请日	2003-06-16
[标]申请(专利权)人(译)	伊斯曼柯达公司		
申请(专利权)人(译)	伊士曼柯达公司		
当前申请(专利权)人(译)	伊士曼柯达公司		
[标]发明人	RIVERS ANDREA S C O EASTMAN KODAK COMPANY TANG MANH C O EASTMAN KODAK COMPANY		
发明人	RIVERS, ANDREA S., C/O EASTMAN KODAK COMPANY TANG, MANH, C/O EASTMAN KODAK COMPANY		
IPC分类号	H01L51/00 H05B33/10 H01L27/32 H01L51/30 H01L51/40 H01L51/50 H01L51/56		
CPC分类号	H01L51/0013 H01L27/3211 H01L51/0052 H01L51/0059 H01L51/0062 H01L51/0077 H01L51/0084 H01L51/0085 H01L51/0089 H01L51/56		
优先权	10/184417 2002-06-27 US		
其他公开文献	EP1376715A2		
外部链接	Espacenet		

摘要(译)

一种沉积OLED发光层的方法，包括：提供具有至少一个可辨别特征的OLED基板；提供横向和角度可移动的光束；提供包括发光材料并具有能量吸收层的未图案化供体元件，其布置成使得当供体元件相对于OLED基板适当定位时，光束可被能量吸收层吸收以加热发光材料和导致其转移；检测OLED基板上可辨别特征相对于光束位置的位置，以确定OLED基板相对于光束的位置和方向；角度地移动光束然后根据检测到的OLED基板的位置和取向以光栅方式移动光束，并且当光束移动到不同的横向位置时改变光束的致动定时。

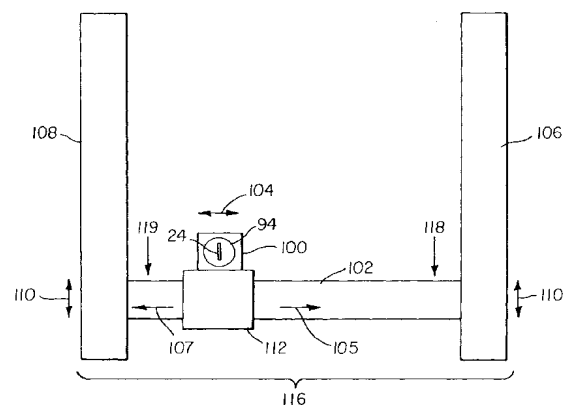


FIG. 5