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(54) **A display device and method for manufacturing thereof**

(57) It is a problem to provide an electric apparatus less in consumption power and long in life by the manufacture using the display device.

An insulating bank 103a is provided in a form surrounding the pixel portions 110a on first electrodes 102a over a substrate. The entire surface is applied, by a wet scheme(method), with an organic conductive film 104. The organic conductive film 104 has a thickness form of $T2 > T1 > T3$ under the influence of the insulating bank

103. Accordingly, the portion T3 has an increased resistance in a lateral direction, making possible to prevent against crosstalk. Due to a conductive polymer as a buffer layer 104, a display device can be provided which is low in drive voltage. Furthermore, because the portion T2 is increased in thickness, the electric-field concentration is relaxed at and around the pixel portion. This makes it possible to prevent the organic light-emitting element from deteriorating at around the pixel.

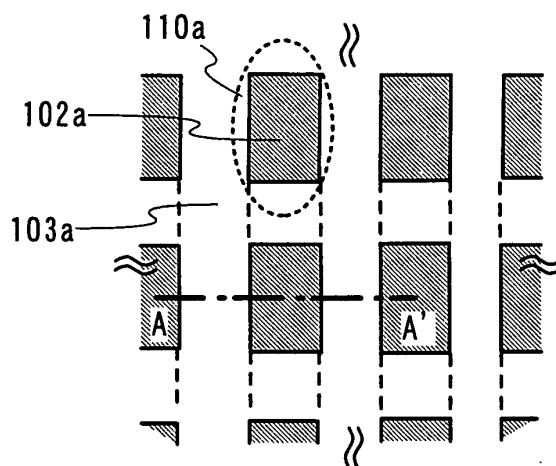


Fig. 1A

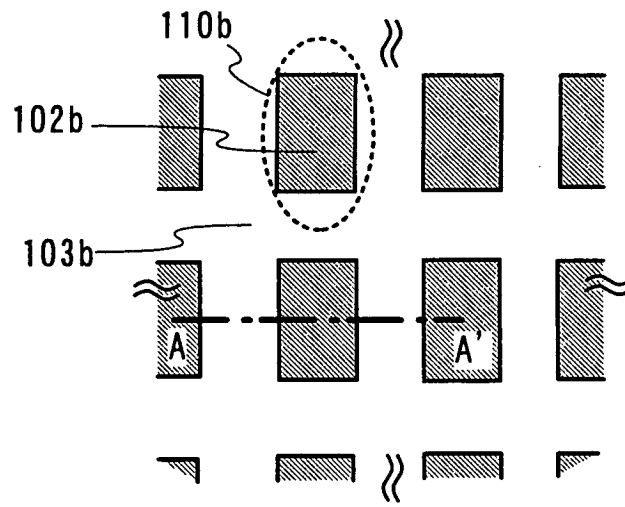


Fig. 1B

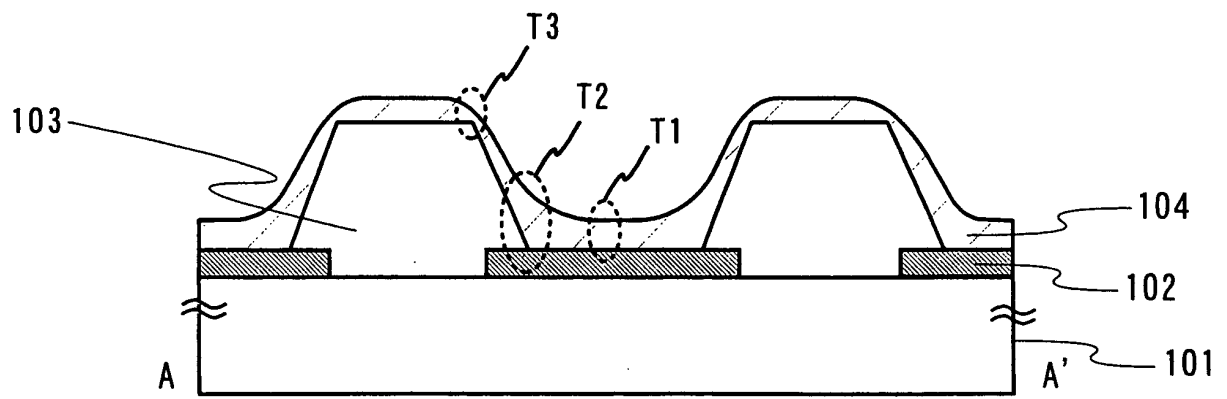


Fig. 1C



EUROPEAN SEARCH REPORT

Application Number
EP 03 00 1028

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	WO 99/12398 A1 (CAMBRIDGE DISPLAY TECH [GB]; FRIEND RICHARD HENRY [GB]) 11 March 1999 (1999-03-11) * page 7, line 4 - line 28 * * page 8, line 22 - page 9, line 23 * * page 13, line 12 - line 21; figures 4,5c *	1-9, 11-21	INV. H01L27/00
X	EP 1 122 800 A2 (SEMICONDUCTOR ENERGY LAB [JP]) 8 August 2001 (2001-08-08) * paragraph [0052] - paragraph [0058]; figures 2A,4C,5B * * figures 8A-8E,9A;9B *	1,3-5, 12-20, 22,23	
X	WO 01/41229 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; DUINEVELD PAULUS C [NL]; ROELANDS) 7 June 2001 (2001-06-07) * page 17, line 4 - page 18, line 22; figures 3,4 *	1-5, 12-14, 16-20	
			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 7 April 2011	Examiner Pusch, Catharina
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			

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EPO FORM 1503 03.82 (P04C01)

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

EP 03 00 1028

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
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07-04-2011

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专利名称(译)	显示装置及其制造方法		
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IPC分类号	H01L27/00 H01L27/32 H01L51/50		
CPC分类号	H01L27/3246 H01L27/3283 H01L51/5052 H01L51/5088 H05B33/10 H01L27/32 H01L27/3276 H01L51/5203 H01L51/5237 H01L51/56 H01L2251/558 H05B33/00		
优先权	2002016524 2002-01-25 JP 2002047379 2002-02-25 JP 2002255216 2002-08-30 JP		
其他公开文献	EP1331667A2		
外部链接	Espacenet		

摘要(译)

通过使用显示装置的制造，提供消耗功率低且寿命长的电气设备是一个问题。绝缘堤103a以围绕基板上的第一电极102a上的像素部分110a的形式提供。通过湿法（方法）将整个表面施加有机导电膜104。在绝缘堤103的影响下，有机导电膜104具有 $T_2 > T_1 > T_3$ 的厚度形式。因此，T3部分在横向上具有增加的电阻，使得可以防止串扰。由于导电聚合物作为缓冲层104，可以提供驱动电压低的显示装置。此外，因为部分T2的厚度增加，所以在像素部分处和周围放松电场集中。这使得可以防止有机发光元件在像素周围劣化。

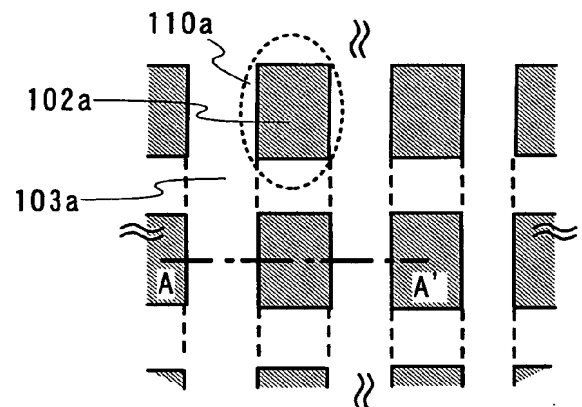


Fig. 1A