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(54) **Full color organic EL display panel, manufacturing method thereof and driving circuit thereof**

(57) Disclosed is a full color flat display panel by using an organic electro-luminescent(EL) device, a manufacturing method thereof and a driving circuit of the organic EL device, in particular, which includes first, second and third pixels, a plurality of first electrodes, and a plurality of second electrodes perpendicularly intersecting the first electrodes, in which each of the first, second and third light emitting pixels is arranged in each of intersecting positions of the first and second electrodes. Light emitting pixels are arranged to have different areas according to luminous efficiency so that a red light emitting area with relatively poorer efficiency is sized larger than a blue or green light emitting area thereby manufacturing an efficient full color organic EL display panel. Also, the influence from the line resistance in the anode lines and the cathode lines is reduced when a constant current is introduced into the device structured of the RGB array in order to realize the white light as full color. Thus, the voltage loss on the line resistance is prevented and the area ratio of the device is adjusted to make each of the RGB pixels for generating the white light have the similar value of drive voltage thereby minimizing power loss.

FIG. 6A

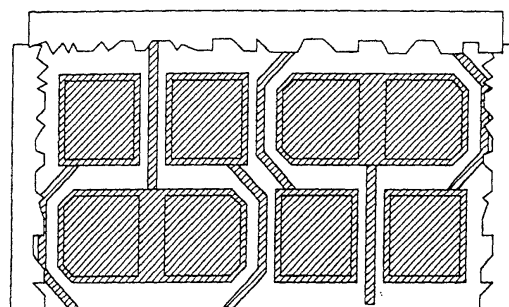
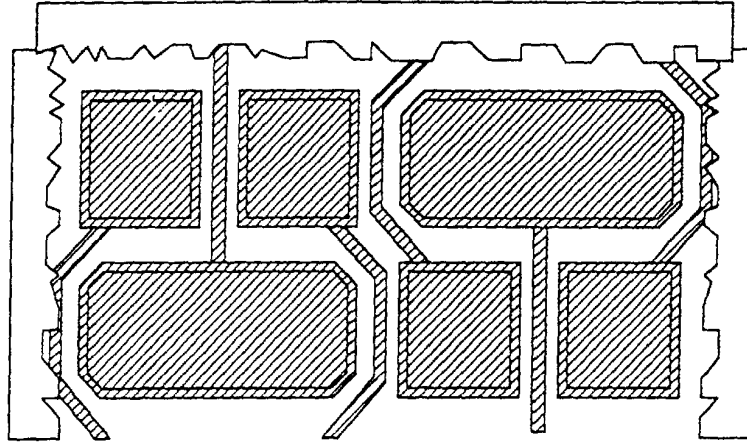


FIG. 6B





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EP 01 30 5299

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A		13-17, 20,21, 23,24, 26,30,31	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner De Laere, A
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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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 January 2005	Examiner De Laere, A
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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28-01-2005

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专利名称(译)	全彩有机EL显示面板及其制造方法和驱动电路		
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发明人	KIM, CHANG NAM KIM, JUNG BAE KIM, HAK SU KIM, MYUNG SEOP		
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优先权	1020000033628 2000-06-19 KR 1020000054990 2000-09-19 KR 1020000062655 2000-10-24 KR		
其他公开文献	EP1168448A2 EP1168448B1		
外部链接	Espacenet		

摘要(译)

本发明公开了一种采用有机电致发光 (EL) 器件的全彩色平板显示器面板及其制造方法, 有机EL器件的驱动电路, 特别是包括第一, 第二和第三像素, 多个第一像素电极和与第一电极垂直相交的多个第二电极, 其中第一, 第二和第三发光像素中的每一个布置在第一和第二电极的每个交叉位置。发光像素根据发光效率布置成具有不同的面积, 使得效率相对较差的红色发光区域的尺寸大于蓝色或绿色发光区域, 从而制造有效的全色有机EL显示面板。而且, 当将恒定电流引入到由RGB阵列构成的器件中时, 阳极线和阴极线中的线电阻的影响减小, 以便将白光实现为全色。因此, 防止了线电阻上的电压损失, 并且调节器件的面积比以使得用于产生白光的每个RGB像素具有相似的驱动电压值, 从而使功率损耗最小化。

FIG. 6A

