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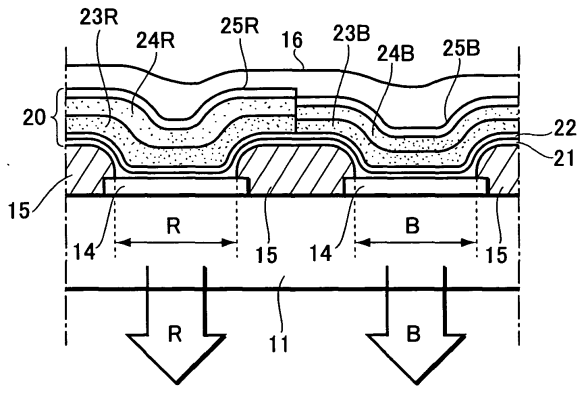
(54) Organic electroluminescent display device

(57) An organic electroluminescent display device (10) includes organic electroluminescent films(20), each containing organic electroluminescent materials and sandwiched by a pair of electrodes(14,16), each forming a plurality of light-emitting elements above a substrate (11). Each pixel of the display device is composed of two different colors light-emitting elements(R,B), and the chromaticity of each color is controlled by changing the concentration of organic electroluminescent materials or by adding foreign materials thereto. For example, if the chromaticity of the red light-emitting element is set to a value shifted toward green side, various colors including white can be produced by mixing this red with blue of the blue light-emitting element. Then, the organic electroluminescent display device can produce high-quality quasi - color images by mixing two colors of which chromaticity values are properly controlled. By virtue of a two-color structure, the aperture ratio becomes high and the manufacturing process becomes simple.

FIG.5



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EUROPEAN SEARCH REPORT

Application Number
EP 03 01 6176

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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L : document cited for other reasons

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 03 01 6176

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08-12-2006

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专利名称(译)	有机电致发光显示装置		
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[标]申请(专利权)人(译)	东北先锋股份有限公司		
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优先权	2002209869 2002-07-18 JP 2002281110 2002-09-26 JP		
其他公开文献	EP1383172A2		
外部链接	Espacenet		

摘要(译)

有机电致发光显示装置（10）包括有机电致发光膜（20），每个有机电致发光膜包含有机电致发光材料并夹在一对电极（14,16）之间，每个电极在基板（11）上方形成多个发光元件。显示装置的每个像素由两种不同颜色的发光元件（R，B）组成，并且通过改变有机电致发光材料的浓度或通过向其添加外来材料来控制每种颜色的色度。例如，如果红色发光元件的色度被设定为朝向绿色侧偏移的值，则通过将该红色与蓝色发光元件的蓝色混合可以产生包括白色的各种颜色。然后，有机电致发光显示装置可以通过混合适当控制色度值的两种颜色来产生高质量的准彩色图像。凭借双色结构，孔径比变高并且制造工艺变得简单。

FIG.5