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(54) Tuned microcavity color oled display

(57) A color organic light-emitting display device having an array of pixels divided into at least two different color pixel sets each color pixel set emitting a different predetermined color light over a common substrate, wherein each pixel in the array includes a metallic bottom-electrode layer (12T) disposed over the substrate (10) and a metallic electrode layer (16R) spaced from the metallic bottom-electrode layer; wherein the material for reflective metallic electrode layer (16R) includes Ag, Au, Al, or alloys thereof, the material for the semitransparent metallic electrode layer (12T) includes Ag, Au, or alloys thereof; and wherein the thickness of the semitransparent metallic electrode layer, the combined thickness of the organic layers (14) and the transparent conductive phase-layer (20), and the placement of the light-emitting layer (14C) are selected so that each pixel in the display forms a tuned microcavity OLED device having an emission output efficiency above that of a comparable OLED device without the microcavity.

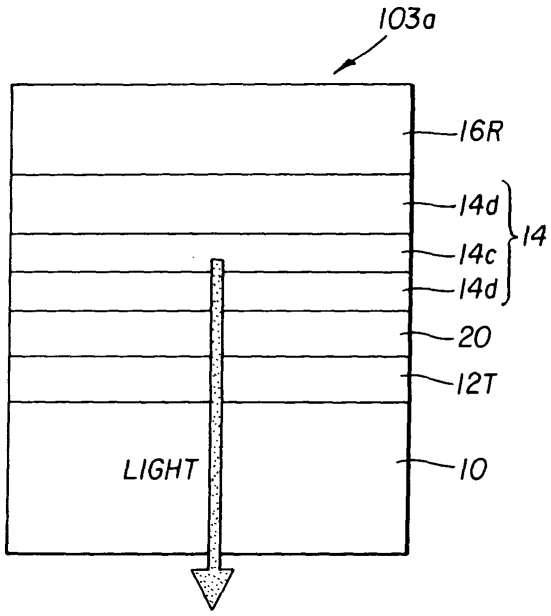

FIG. 3a

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EUROPEAN SEARCH REPORT

Application Number
EP 04 07 5375

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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
Berlin	3 February 2006	Ledoux, S

CATEGORY OF CITED DOCUMENTS

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A : technological background
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D : document cited in the application
L : document cited for other reasons

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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims

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D : document cited in the application
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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申请(专利权)人(译)	伊士曼柯达公司		
当前申请(专利权)人(译)	全球OLED科技有限责任公司		
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发明人	TYAN, YUAN-SHENG FARRUGGIA, GIUSEPPE SHORE, JOEL D.		
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CPC分类号	H01L51/5265 H01L27/3206 H01L51/5206 H01L51/5218 H01L51/5221 H01L51/5234 H01L51/5275		
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外部链接	Espacenet		

摘要(译)

一种彩色有机发光显示装置，具有划分为至少两个不同颜色像素组的像素阵列，每个彩色像素组在公共基板上发射不同的预定颜色光，其中阵列中的每个像素包括金属底电极层设置在基板上和与金属底电极层隔开的金属电极层;其中，用于反射金属电极层的材料包括Ag，Au，Al或其合金，用于半透明金属电极层的材料包括Ag，Au或其合金;其中，选择半透明金属电极层的厚度，有机层和透明导电相层的组合厚度，以及发光层的位置，使得显示器中的每个像素形成调谐微腔OLED器件具有高于没有微腔的类似OLED器件的发射输出效率。

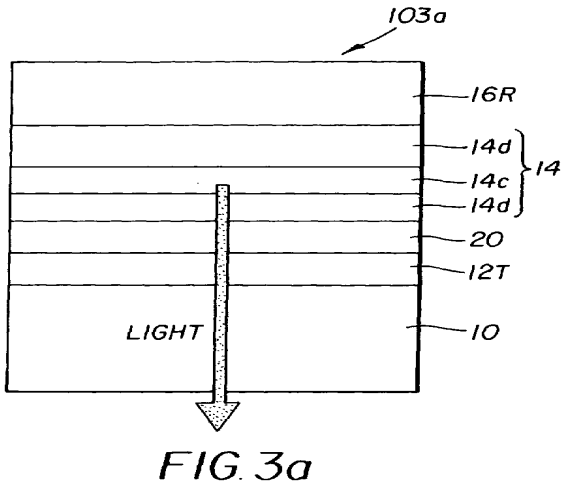

FIG. 3a