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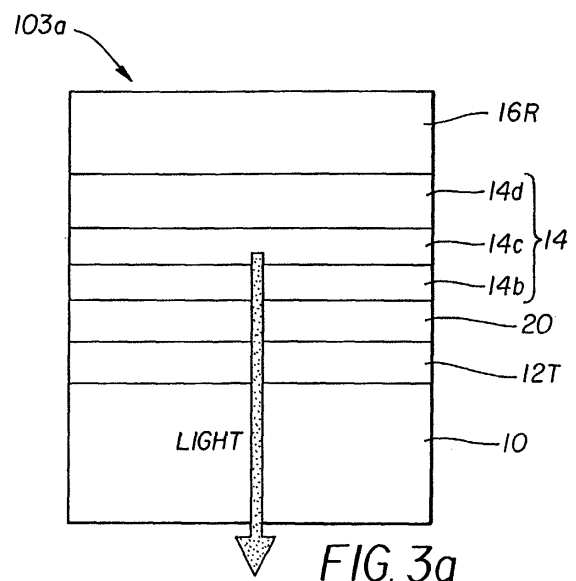
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(54) **Color oled display with improved emission**

(57) A color organic light-emitting display having an array of pixels divided into at least two different color pixel sets each color pixel set emitting a different predetermined color, wherein each pixel in the array includes a metallic bottom-electrode layer (12T); an organic EL element (14) including a light-emitting layer (14C) for emitting the predetermined color light and a metallic top-electrode layer (16R) over the organic EL element, spaced from the metallic bottom-electrode layer by a distance selected to improve the emission light output efficiency; and wherein one of the metallic electrode layers is semitransparent and the other one is essentially opaque and reflective; wherein the material for the semitransparent metallic electrode and the reflective electrode includes specific materials; and the thickness of the semitransparent metallic electrode layer and the position of the light-emitting layer between the electrodes are selected to enhance emission light output efficiency.



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EUROPEAN SEARCH REPORT

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	* paragraphs [0031] - [0044], [0058], [0059]; figures 1A-2,10 *	2,6,10	
X	EP 1 154 676 A (SONY CORPORATION) 14 November 2001 (2001-11-14)	1,3-5, 7-9	
A	* paragraphs [0009] - [0021], [0028] - [0064]; figures 4,13,15,18 *	2,6,10	
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A	* paragraphs [0010] - [0012], [0026] *		
	TAKADA N ET AL: "CONTROL OF EMISSION CHARACTERISTICS IN ORGANIC THIN-FILM ELECTROLUMINESCENT DIODES USING AN OPTICAL-MICROCAVITY STRUCTURE" APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, US, vol. 63, no. 15, 11 October 1993 (1993-10-11), pages 2032-2034, XP000397816 ISSN: 0003-6951 * the whole document *	1-10	
E	EP 1 422 977 A (SONY CORPORATION) 26 May 2004 (2004-05-26)	1,2,7-10	
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The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of the search 1 February 2006	Examiner Ledoux, S
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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EP 04 07 5125

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专利名称(译)	彩色oled显示屏，改善了发射		
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其他公开文献	EP1443572A2		
外部链接	Espacenet		

摘要(译)

一种彩色有机发光显示器，具有分成至少两个不同颜色像素组的像素阵列，每个颜色像素组发出不同的预定颜色，其中阵列中的每个像素包括金属底电极层（12T）；有机EL元件（14），包括用于发射预定颜色光的发光层（14C）和在有机EL元件上方的金属顶电极层（16R），与金属底电极层隔开选定的距离提高发光输出效率；其中一个金属电极层是半透明的，另一个是基本上不透明和反射的；其中半透明金属电极和反射电极的材料包括特定材料；选择半透明金属电极层的厚度和电极之间的发光层的位置，以提高发光输出效率。

