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(54) **A color OLED display with improved power efficiency**

(57) A color OLED display includes an array of light emitting OLED pixels (10), each pixel having three or more gamut elements (12,14,16) for emitting different colors of light specifying a gamut and at least one additional element (18) for emitting a color of light within the gamut and wherein the power efficiency of the additional element is higher than the power efficiency of at least one of the three or more gamut elements; wherein all of the gamut elements for each color in the display are arranged in a first direction in a line such that no differently colored gamut element is in the line; wherein the colored gamut elements are arranged in a second direction orthogonal to the first direction in a line such that the colors of the gamut elements alternate in that line; and wherein the additional elements are arranged in lines in both the first and second directions.

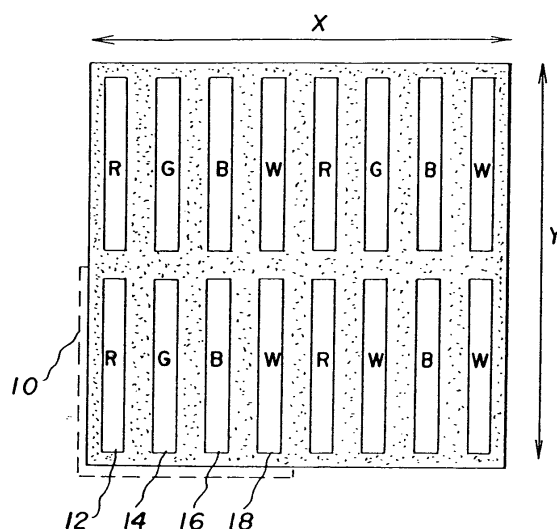


FIG. 1

EP 1 473 772 A3



EUROPEAN SEARCH REPORT

Application Number
EP 04 07 6186

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 00/11728 A (CAMBRIDGE DISPLAY TECH [GB]; BURROUGHS JEREMY HENLEY [GB]) 2 March 2000 (2000-03-02) * page 1, paragraph 3 * * page 2, paragraph 3 * * figure 3 * * page 6, lines 12-24 *	1	INV. H01L27/00 ADD. G09G3/32
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			TECHNICAL FIELDS SEARCHED (IPC)
			H05B H01L
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 26 March 2009	Examiner De Laere, Ann
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 04 07 6186

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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26-03-2009

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专利名称(译)	彩色OLED显示屏，具有更高的功效		
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其他公开文献	EP1473772A8 EP1473772A2 EP1473772B1		
外部链接	Espacenet		

摘要(译)

彩色OLED显示器包括发光OLED像素阵列(10)，每个像素具有三个或更多个色域元件(12,14,16)，用于发出指定色域的不同颜色的光，以及用于发出至少一个附加元件(18)。在色域内发射光的颜色，并且其中附加元件的功率效率高于三个或更多个色域元件中的至少一个的功率效率；其中，显示器中每种颜色的所有色域元件在第一方向上排成一行，使得在该行中没有不同颜色的色域元件；其中，有色域元件在与第一方向垂直的第二方向上排成一行，使得色域元件的颜色在该行中交替；并且其中附加元件在第一和第二方向上排列成行。

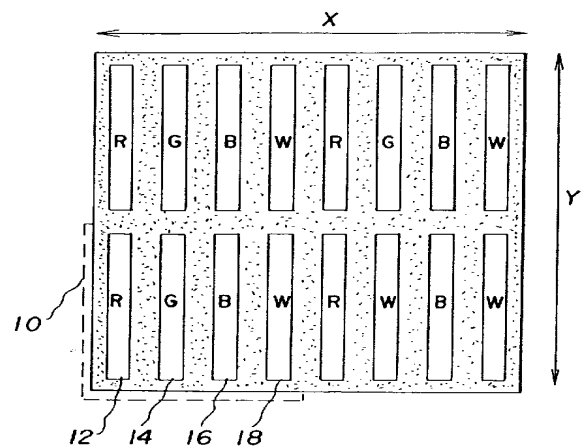


FIG. 1