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(54) **Polymer organic light emitting device with improved color control**

(57) An OLED[100, 200, 300] for emitting light at a predetermined peak wavelength, λ . The OLED[100, 200, 300] includes an anode layer[106, 206], a cathode layer[112, 212] and an electroluminescent layer[110, 210] constructed from an organic light emitting compound that generates light, including light having a wavelength equal to λ , by the recombination of holes and electrons. The electroluminescent layer[110, 210] is electrically connected to the anode layer[106, 206] and the cathode layer[112, 212] and is located between the anode and cathode layers. The OLED[100, 200, 300] includes a first reflector[104, 202] and second reflector, displaced from one another. The anode layer[106, 206] or cathode layer[112, 212] can serve as one

of the reflectors. A spacer layer[108, 208, 220] constructed from a material that is transparent at λ is included between the reflectors and has a thickness that is adjusted such that the optical path length between the first and second reflectors is equal to $N\lambda/2$, where N is a positive integer. The spacer[108, 208, 220] may include a hole transport material located between the electroluminescent layer[110, 210] and the anode layer. The spacer[108, 208, 220] may also be constructed from a layer that is located between the anode or cathode layers and one of the reflectors. If the spacer layer [108, 208, 220] is located between the anode and cathode layers, the spacer layer[108, 208, 220] is constructed from an electrically conducting material.

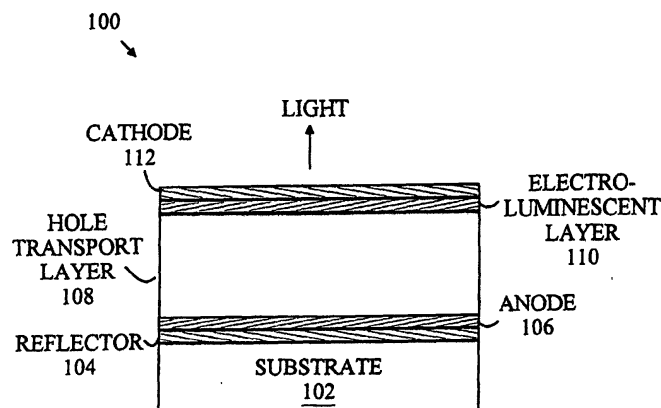


FIGURE 2



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EUROPEAN SEARCH REPORT

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EP 01 13 0337

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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 25 June 2004	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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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
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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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
Place of search The Hague		Date of completion of the search 25 June 2004	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
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 13 0337

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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25-06-2004

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

专利名称(译)	具有改进的颜色控制的聚合物有机发光装置		
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申请(专利权)人(译)	安捷伦科技公司 (以下简称特拉华州公司)		
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CPC分类号	H01L51/5265 H01L51/5012		
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其他公开文献	EP1244153A2 EP1244153B1 EP1244153B9		
外部链接	Espacenet		

摘要(译)

OLED [100,200,300]，用于以预定的峰值波长 λ 发光。OLED [100,200,300]包括阳极层[106,206]，阴极层[112,212]和由产生光的有机发光化合物构成的电致发光层[110,210]，包括具有光的有机发光化合物通过空穴和电子的复合，波长等于 λ 。电致发光层[110,210]电连接到阳极层[106,206]和阴极层[112,212]并且位于阳极和阴极层之间。OLED [100,200,300]包括彼此移位的第一反射器[104,202]和第二反射器。阳极层[106,206]或阴极层[112,212]可以用作反射器之一。由在 λ 处透明的材料构成的间隔层[108,208,220]包括在反射器之间，并且具有调整的厚度，使得第一和第二反射器之间的光程长度等于 $N\lambda/2$ ，其中N是正整数。间隔物[108,208,220]可以包括位于电致发光层[110,210]和阳极层之间的空穴传输材料。间隔物[108,208,220]也可以由位于阳极或阴极层与反射器之一之间的层构成。如果间隔层[108,208,220]位于阳极层和阴极层之间，则间隔层[108,208,220]由导电材料构成。

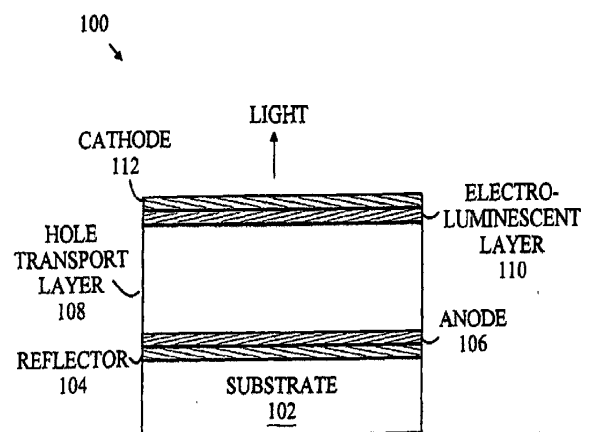


FIGURE 2