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(54) **Light-emitting diode display and method of producing the same**

(57) This invention relates light-emitting diode displays with simple structure and fabricating method as well as excellent efficiency. In an embodiment, the display features a nanorod LED array arranged on a substrate and divided into a first, second, and third sub-pixel

els. Two electrodes are preferably arranged in a vertical configuration for driving the sub-pixels. In another embodiment, a method features the sub-pixels for emitting multi-primary colors being formed on a conductive substrate and thus simplifies the steps.

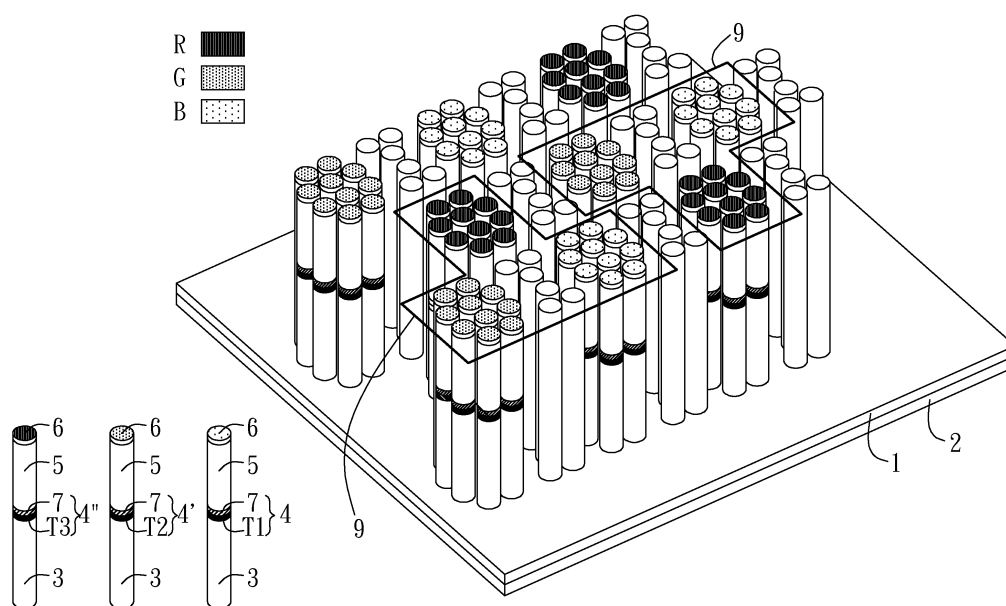


FIG. 7a



EUROPEAN SEARCH REPORT

Application Number
EP 13 16 7655

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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	* abstract * * paragraph [0020] - paragraph [0028]; figure 1 * * paragraph [0002] - paragraph [0005] *	13-15	ADD. H01L33/06 H01L33/32 H01L33/18
X	JP 2009 129941 A (PANASONIC CORP) 11 June 2009 (2009-06-11) * abstract * * paragraph [0062] - paragraph [0070]; figure 2 * * paragraph [0042] - paragraph [0046] *	1,3-7,9, 11-15	
Y	US 2012/097920 A1 (GWO SHANG-JR [TW] ET AL) 26 April 2012 (2012-04-26) * abstract *	13-15	
A	US 2011/254034 A1 (KONSEK STEVEN [SE] ET AL) 20 October 2011 (2011-10-20) * abstract * * paragraphs [0037], [0038]; figure 7 *	1-12	
A	US 2011/254034 A1 (KONSEK STEVEN [SE] ET AL) 20 October 2011 (2011-10-20) * abstract * * paragraphs [0037], [0038]; figure 7 *	1,9	TECHNICAL FIELDS SEARCHED (IPC)
A	CHEN HUNG-YING ET AL: "Structure and photoluminescence properties of epitaxially oriented GaN nanorods grown on Si(111) by plasma-assisted molecular-beam epitaxy", APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS, US, vol. 89, no. 24, 11 December 2006 (2006-12-11), pages 243105-243105, XP012087647, ISSN: 0003-6951, DOI: 10.1063/1.2404597 * abstract *	9-15	H01L
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 November 2014	Examiner Dehestru, Bastien
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	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 13 16 7655

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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EPO FORM P459

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

专利名称(译)	发光二极管显示器及其制造方法		
公开(公告)号	EP2665100A3	公开(公告)日	2015-01-07
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[标]申请(专利权)人(译)	国立清华大学		
申请(专利权)人(译)	清大		
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IPC分类号	H01L27/15 H01L33/08 H01L33/06 H01L33/32 H01L33/18		
CPC分类号	H01L27/156 H01L33/06 H01L33/08 H01L33/18 H01L33/32		
优先权	13/471329 2012-05-14 US		
其他公开文献	EP2665100A2		
外部链接	Espacenet		

摘要(译)

本发明涉及具有柔和结构的发光二极管显示器和制造方法以及优异的效率。在一个实施例中，显示器的特征在于布置在基板上并分成第一，第二和第三子像素的纳米棒LED阵列。两个电极优选地以垂直配置布置，用于驱动子像素。在另一实施例中，一种方法的特征在于，用于发射多原色的子像素形成在导电基板上，从而简化了步骤。

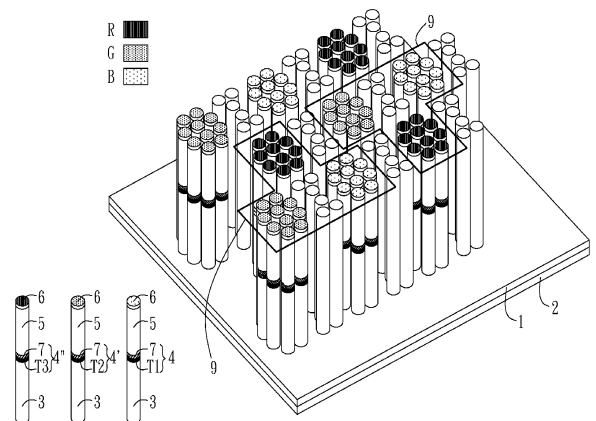


FIG. 7a