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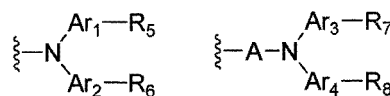
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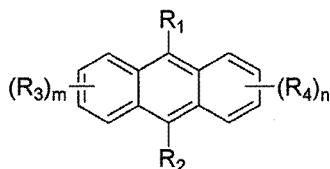
(54) **Novel organic electroluminescent compounds and organic electroluminescent device using the same**

(57) The present invention relates to novel organic electroluminescent compounds, and organic electroluminescent devices employing the same as electroluminescent material. Specifically, the organic electroluminescent compounds according to the invention are **characterized in that** they are represented by Chemical Formula (1):

wherein, R_1 , R_2 , R_3 and R_4 are independently selected from the following structures:



Chemical Formula 1



A represents (C6-C60)arylene or (C5-C60)heteroarylene; and
m and n independently represent an integer from 0 to 4, provided that m+n is an integer from 1 to 8.

Since the organic electroluminescent compounds according to the invention have good luminous efficiency and excellent color purity and life property of material, OLED's having very good operation life can be manufactured therefrom.



EUROPEAN SEARCH REPORT

Application Number
EP 09 15 4941

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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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A	* page 4, line 18 - page 5, line 16; examples 4,6; compounds Inv-23 *	2-9	
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A	* page 3, line 5 - page 4, line 2; example 1; compounds Inv-14 *	2-9	
X,P	WO 2009/025724 A1 (EASTMAN KODAK CO [US]; SPINDLER JEFFREY PAUL [US]; HATWAR TUKARAM KISA) 26 February 2009 (2009-02-26)	1,5-7	TECHNICAL FIELDS SEARCHED (IPC) C09K H05B H01L
	* page 2, lines 14-28 * * examples 1,3,4; compound G * * pages 4-10 *		
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	* page 16, line 15 - page 18, line 10 * * page 22 - page 29, line 7; compounds a1-a138,b112-b120 * * page 56, lines 17-24 *		
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 5 March 2010	Examiner Delaporte, P
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 (F04C01)

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

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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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05-03-2010

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专利名称(译)	新型机电致发光化合物和使用其的机电致发光器件		
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优先权	1020080025768 2008-03-20 KR		
其他公开文献	EP2103666A2		
外部链接	Espacenet		

摘要(译)

本发明涉及新型机电致发光化合物，以及采用其作为电致发光材料的机电致发光器件。具体地，根据本发明的机电致发光化合物的特征在于它们由化学式(1)表示：其中，R₁，R₂，R₃和R₄独立地选自以下结构：A表示(C₆-C₆₀)亚芳基或(C₅-C₆₀)杂亚芳基；m和n独立地表示0至4的整数，条件是m+n是1至8的整数。由于根据本发明的机电致发光化合物具有良好的发光效率和优异的色纯度和材料的寿命特性，OLED的可以由此制造具有非常好的使用寿命的装置。

Chemical Formula 1

