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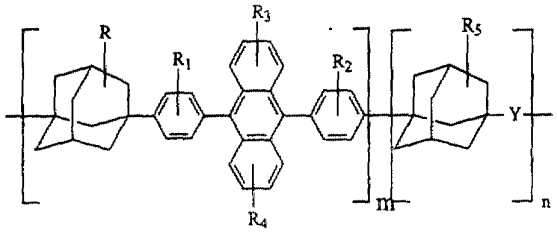
(54) Electroluminescent devices having phenylanthracene-based polymers

(57) An electroluminescent device comprises an anode, a cathode, and polymer luminescent materials disposed between the anode and cathode, the polymeric luminescent materials includes 9-(4-adamantanyl)phenyl)-10-phenylanthracene-based polymers of the following formula:



wherein:

substituents R, R_1, R_2, R_3, R_4 and R_5 are each individually hydrogen, or alkyl or alkoxy of from 1 to 24 carbon atoms; aryl or substituted aryl of from 6 to 28 carbon atoms; or heteroaryl or substituted heteroaryl of from 4 to 40 carbons; or F, Cl, Br; or a cyano group; or a nitro group; wherein

the ratio of n/(m+n) is between 0 to 1 wherein m and n are integers but m cannot be 0; and Y are divalent linking groups.

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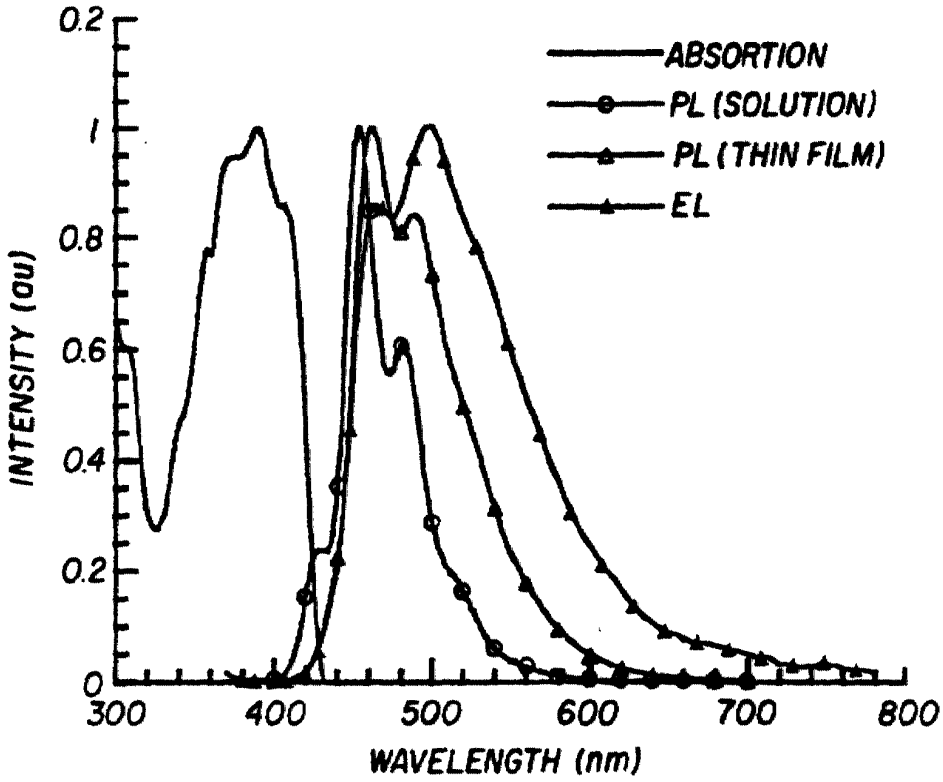
0.2
1
0.8
0.6
0.4
0.2
0
INTENSITY (au)
300
400
500
600
700
800
WAVELENGTH (nm)
ABSORTION
PL (SOLUTION)
PL (THIN FILM)
EL

FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 00 20 3196

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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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A	CHERN Y-T ET AL: "LOW DIELECTRIC CONSTANTS OF SOLUBLE POLYIMIDES BASED ON ADAMANTANE" MACROMOLECULES, AMERICAN CHEMICAL SOCIETY. EASTON, US, vol. 30, no. 16, 11 August 1997 (1997-08-11), pages 4646-4651, XP000696814 ISSN: 0024-9297 * column 1 *	1-9	TECHNICAL FIELDS SEARCHED (Int.Cl.7) C09K H05B H01L
P,A	EP 1 009 044 A (EASTMAN KODAK CO) 14 June 2000 (2000-06-14) * claim 2 *	1-9	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	9 April 2002	Doslik, N

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
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P : intermediate document

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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 00 20 3196

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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09-04-2002

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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)	具有基于苯基蒽的聚合物的电致发光器件		
公开(公告)号	EP1088875A3	公开(公告)日	2002-06-26
申请号	EP2000203196	申请日	2000-09-14
[标]申请(专利权)人(译)	伊斯曼柯达公司		
申请(专利权)人(译)	伊士曼柯达公司		
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发明人	ZHENG, SHIYING SHI, JIANMIN KLUBEK, KEVIN P.		
IPC分类号	H01L51/50 C08G61/00 C09K11/06 H01L51/00 H01L51/30 H05B33/14 H01L51/20		
CPC分类号	H01L51/0036 C09K11/06 H01L51/0035 H01L51/0038 H01L51/0043 H01L51/0052 H01L51/5012 Y10S428/917		
代理机构(译)	家长，YVES		
优先权	09/410767 1999-10-01 US		
其他公开文献	EP1088875A2 EP1088875B1		
外部链接	Espacenet		

摘要(译)

一种电致发光器件，包括阳极，阴极和设置在阳极和阴极之间的聚合物发光材料，聚合物发光材料包括下式的9-（4-金刚烷基）苯基）-10-苯基蒽基聚合物：其中：取代基R，R1，R2，R3，R4和R5各自为氢，或具有1-24个碳原子的烷基或烷氧基;芳基或取代的芳基，具有6至28个碳原子;或4至40个碳的杂芳基或取代的杂芳基;或F，Cl，Br;或氰基;或硝基;其中n /（m + n）的比值在0到1之间，其中m和n是整数但m不能是0;和Y是二价连接基团。

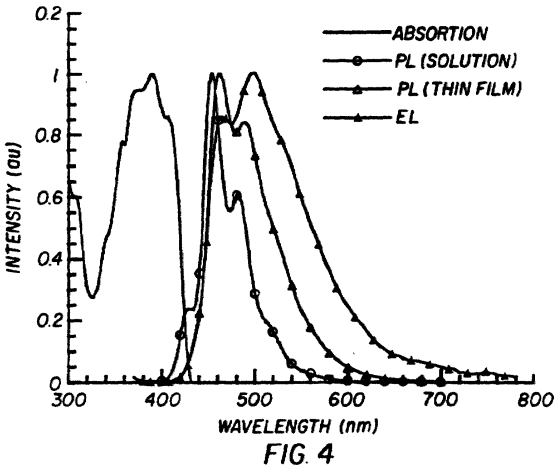

FIG. 4