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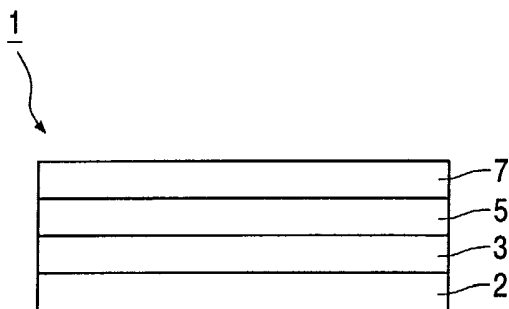
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(54) Title: ELECTROLUMINESCENT DEVICE



(57) Abstract: An electroluminescent device includes a first electrode, a second electrode and, dispersed therebetween, an electroluminescent layer comprising a first and a second electroluminescent compound capable of emitting light of a first and a second color respectively, the first color being different from the second color. The electroluminescent device is capable of reversibly emitting light having predominantly the first color when biased at a low voltage in a first direction and light having predominantly the second color when biased at a low voltage in a second direction opposite to the first direction. The first electroluminescent compound may be an electroluminescent polymer or low-molecular weight conjugated electroluminescent compound. The second electroluminescent compound is a metal-ion complex, typically mono-kernel or bi-kernel, having one or more ligands. At least one of said one or more ligands is substituted with a conjugated moiety, such as an oligo-phenylenevinylene or an oligo-phenylene derivative. The metal-ion complex is an ionic compound and has counter ions for balancing the charges of the metal ion which are capable of migrating within the electroluminescent device when the electroluminescent device is biased.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/02052

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H01L51/50 H01L27/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MORI T ET AL MORI T ET AL: "PREPARATION AND PROPERTIES OF AN ORGANIC LIGHT EMITTING DIODE WITH TWO EMISSION COLORS DEPENDENT ON THE VOLTAGE POLARITY PREPARATION AND PROPERTIES OF AN ORGANIC LIGHT EMITTING DIODE WITH TWO EMISSION COLORS DEPENDENT ON THE VOLTAGE POLARITY" APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 69, no. 22, 25 November 1996 (1996-11-25), pages 3309-3311, XP000643634 figure 1</p> <p style="text-align: center;">----- -/--</p>	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- * & * document member of the same patent family

Date of the actual completion of the international search 29 March 2004	Date of mailing of the international search report 06/04/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <p style="text-align: center;">Bader, K</p>

INTERNATIONAL SEARCH REPORT

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Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 6 235 414 B1 (WANG YUNZHANG ET AL) 22 May 2001 (2001-05-22) figure 3 column 4, line 40 - line 55 column 5, line 24 - column 6, line 22 -----	1
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			US 6235414 B1	22-05-2001
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