



European Patent
Office

**SUPPLEMENTARY
PARTIAL EUROPEAN SEARCH REPORT**

Application Number

which under Rule 45 of the European Patent Convention EP 03 79 1210 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DATABASE WPI Week 199932 Derwent Publications Ltd., London, GB; AN 1999-377357 XP002439499 -& JP 11 144875 A (MITSUI CHEM INC) 28 May 1999 (1999-05-28) * abstract *	1,3	INV. C07C211/61 C09K11/06 H05B33/14
X	----- DATABASE WPI Week 199932 Derwent Publications Ltd., London, GB; AN 1999-377356 XP002439500 -& JP 11 144873 A (MITSUI CHEM INC) 28 May 1999 (1999-05-28) * abstract * ----- -/--	1,3	
			TECHNICAL FIELDS SEARCHED (IPC)
			C07C C09K
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
INCOMPLETE SEARCH			
The Search Division considers that the present application, or some or all of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for the following claims: Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
The Hague		27 June 2007	Bonnevalle, Elia
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 03.02 (P04C20)



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	DATABASE WPI Week 200126 Derwent Publications Ltd., London, GB; AN 2001-248018 XP002439501 -& JP 2000 327639 A (MITSUI CHEM INC) 28 November 2000 (2000-11-28) * abstract *	1	
X	----- DATABASE WPI Week 199938 Derwent Publications Ltd., London, GB; AN 1999-448144 XP002439502 -& JP 11 184109 A (CANON KK) 9 July 1999 (1999-07-09) * abstract *	1	
X	----- JP 09 281728 A (CANON KK) 31 October 1997 (1997-10-31) * page 6 - page 12 *	1	TECHNICAL FIELDS SEARCHED (IPC)
X	----- JP 2001 010996 A (MITSUI CHEMICALS INC) 16 January 2001 (2001-01-16) * compounds B13-B78 *	1	
X	----- JP 07 281464 A (CANON KK) 27 October 1995 (1995-10-27) * page 17 - page 23 *	1	
X	----- DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; KIMURA, MICHIO ET AL: "Electrophotographic photoreceptor and electrophotographic apparatus" XP002439494 retrieved from STN Database accession no. 1996:254489 * abstract *	1	
	-/--		



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
	& JP 08 044096 A (RICOH KK, JAPAN) 16 February 1996 (1996-02-16) -----		
X	EP 0 821 277 A1 (KONISHIROKU PHOTO IND [JP]) 28 January 1998 (1998-01-28) * page 10; claim 7; compound 3 *	1	
E	WO 2004/020372 A (CANON KK [JP]; SUZUKI KOICHI [JP]; HIRAOKA MIZUHO [JP]; SENOO AKIHIRO) 11 March 2004 (2004-03-11) * page 29; claim 10 * -----	1,3	
			TECHNICAL FIELDS SEARCHED (IPC)



Claim(s) searched incompletely:
1-16

Reason for the limitation of the search:

The present claims 1-16 relate to an extremely large number of possible compounds/use. Support and disclosure in the sense of Article 84 and 83 EPC is to be found however for only a very small proportion of the compounds/use, see the examples. The non-compliance with the substantive provisions is to such an extent, that a meaningful search of the whole claimed subject-matter of the claim could not be carried out (Rule 45 EPC and Guidelines B-VIII, 3). The extent of the search was consequently limited.

The search of claims 1-16 was restricted to those claimed compounds/use which appear to be supported and a generalisation of their structural formulae, wherein R1, R2, R3 and R4 represent CH₃, X1 and X3 represent a direct bond or para - phenylene, Y1 and Y3 represent phenyl or para - methylphenyl, Y2 and Y4 represent phenyl or condensed phenyl, was taken in consideration, so widely covering the examples. The cited documents are only a representative sample of the citations that were found.

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

EP 03 79 1210

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-06-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 11144875 A	28-05-1999	JP 3838766 B2	25-10-2006
JP 11144873 A	28-05-1999	JP 3856546 B2	13-12-2006
JP 2000327639 A	28-11-2000	NONE	
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专利名称(译)	单氨基茱化合物和使用其的有机发光装置		
公开(公告)号	EP1542962A4	公开(公告)日	2007-08-08
申请号	EP2003791210	申请日	2003-08-12
[标]申请(专利权)人(译)	佳能株式会社		
申请(专利权)人(译)	佳能株式会社		
当前申请(专利权)人(译)	佳能株式会社		
发明人	SAITO, AKIHITOC/O CANON KABUSHIKI KAISHA HIRAOKA, MIZUHOC/O CANON KABUSHIKI KAISHA SUZUKI, KOICHC/O CANON KABUSHIKI KAISHA SENOO, AKIHIROC/O CANON KABUSHIKI KAISHA TANABE, HIROSHIC/O CANON KABUSHIKI KAISHA YAMADA, NAOIC/O CANON KABUSHIKI KAISHA NEGISHI, CHIKAC/O CANON KABUSHIKI KAISHA		
IPC分类号	H01L51/50 C07C211/61 C09K11/06 H01L51/00 H01L51/30 H05B33/14		
CPC分类号	H01L51/0058 C07C211/61 C07C2603/18 C09K11/06 C09K2211/1007 C09K2211/1011 C09K2211/1014 C09K2211/1029 H01L51/0035 H01L51/0036 H01L51/0038 H01L51/0039 H01L51/005 H01L51/0054 H01L51/0055 H01L51/0059 H01L51/006 H01L51/0067 H01L51/0068 H01L51/007 H01L51/0072 H01L51/0077 H01L51/0078 H01L51/0081 H01L51/0094 H01L51/5012 H01L2251/308 Y10S428/917		
代理机构(译)	VOLLNHALS, 奥里尔		
优先权	2002252846 2002-08-30 JP		
其他公开文献	EP1542962B1 EP1542962A1		
外部链接	Espacenet		

摘要(译)

提供了新型单氨基茱化合物，并且使用这些化合物提供了具有极高纯度的良好发光色调并具有高发光效率，高亮度和更长工作寿命的光学输出的有机发光器件。由以下通式[1]表示的单氨基茱化合物：

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X	DATABASE WPI Week 199932 Derwent Publications Ltd., London, GB: AN 1999-377356 XP002439509 -S JP 11 144873 A (MITSUI CHEM INC) 28 May 1999 (1999-05-28) * abstract *	1,3	
The supplementary search report has been based on the last set of claims valid and published under the No. 36/009.			
INCOMPLETE SEARCH The Search Division considers that the present application, or some or all of its claims, does/ do not comply with the criteria on the extent of, or the manner of, search within the time of the art patent as defined in the Rules.			
Claims searched completely: Claims searched incompletely: Claims not searched: Reason for the limitation of the search: see sheet C			
1	Place of search The Hague	Date of completion of the search 27 June 2007	Examiner Bonneville, Elia
CATEGORY OF CITED DOCUMENTS X : substantially relevant (see above) Y : particularly relevant if combined with another document of the same category O : non-written disclosures I : intermediate document T : theory or principle underlying the invention E : priority or first document, but publication, or other, than this one D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			