



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	GRUSHIN V V ET AL: "New, efficient electroluminescent materials based on organometallic Ir complexes" CHEMICAL COMMUNICATIONS - CHEMCOM, ROYAL SOCIETY OF CHEMISTRY, GB, 23 July 2001 (2001-07-23), pages 1494-1495, XP002196401 ISSN: 1359-7345 * page 1494; compound 1D *	1-6,11	INV. H05B33/12 C07D213/02 C07D215/00 C07D217/00 C07D239/02 C07F15/00 C07D213/26 C07D213/30 C07D213/61 C07D213/68 C07D215/04 C07D239/26 C09K11/06 H01L51/00
E	WO 02/15645 A (UNIV PRINCETON [US]; UNIV SOUTHERN CALIFORNIA [US]; UNIVERSAL DISPLAY) 21 February 2002 (2002-02-21) * pages 24,25 *	8,9	
E	WO 02/066462 A (GLAXO GROUP LTD [GB]; GELLIBERT FRANCOISE JEANNE [FR]; MATHEWS NEIL [G] 29 August 2002 (2002-08-29) page 28, intermediate A2	11	
X	CH 647 508 A5 (LONZA AG) 31 January 1985 (1985-01-31) * page 3; example 10 *	11	TECHNICAL FIELDS SEARCHED (IPC)
E	EP 1 348 711 A (CANON KK [JP]) 1 October 2003 (2003-10-01) * pages 66-76 * * pages 14-51 *	1-6	C07F C07D C09K H01L
E	EP 1 295 514 B1 (DU PONT [US]) 2 August 2006 (2006-08-02) * page 7; compound IV * * page 11, paragraph 34 *	5	
E	EP 1 399 002 A (CANON KK [JP]) 17 March 2004 (2004-03-17) * page 10; compound D * * page 17; compound H *	6	
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
Place of search		Date of completion of the search	Examiner
The Hague		29 January 2007	Duval, Eric
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			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-4 (partially), 7-10

iridium compounds where La, Lb and Lc are non-fused
phenyl-pyridines of formula (I), and organic electronic
devices comprising them

2. claims: 1-4 (partially), 5, 6

iridium compounds where La, Lb and Lc are
phenyl-(iso)quinolines of formulae (XI) or (XII), and
organic electronic devices comprising them

3. claim: 11

intermediate phenyl-pyridines 12a through 12j

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

EP 01 99 1428

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.

29-01-2007

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			US 2003141809 A1	31-07-2003

专利名称(译)	具有氟化苯基吡啶，苯基嘧啶和苯基喹啉的电致发光铱化合物和用这些化合物制成的装置		
公开(公告)号	EP1466506A4	公开(公告)日	2007-03-07
申请号	EP2001991428	申请日	2001-12-26
[标]申请(专利权)人(译)	纳幕尔杜邦公司		
申请(专利权)人(译)	E·I·杜邦和公司		
当前申请(专利权)人(译)	E·I·杜邦和公司		
[标]发明人	PETROV VIACHESLAV A WANG YING GRUSHIN VLADIMIR		
发明人	PETROV, VIACHESLAV, A. WANG, YING GRUSHIN, VLADIMIR		
IPC分类号	H01L51/50 H05B33/12 C07D213/02 C07D213/26 C07D213/30 C07D213/61 C07D213/68 C07D215/00 C07D215/04 C07D215/12 C07D217/00 C07D239/02 C07D239/26 C07F15/00 C09K11/06 H01L51/00 H01L51/30 H05B H05B33/14 H05B33/22		
CPC分类号	C07D213/30 C07D213/26 C07D213/61 C07D213/68 C07D215/04 C07D239/26 C07F15/0033 C09K11/06 C09K2211/1007 C09K2211/1029 C09K2211/185 H01L51/0059 H01L51/0081 H01L51/0085 H01L51/5016 H05B33/14		
代理机构(译)	TOWLER , PHILIP DEAN		
其他公开文献	EP1466506A1		
外部链接	Espacenet		

摘要(译)

本发明一般涉及电致发光Ir (III) 化合物，用于制备Ir (III) 化合物的取代的2-苯基吡啶，苯基嘧啶和苯基喹啉，以及用Ir (III) 化合物制备的装置

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4	Place of search: The Hague	Date of completion of the search: 29 January 2007	Examiner: Duval, Eric
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: abstract D: non-written disclosure F: intermediate document E: theory or principle underlying the invention G: prior art document, not published on, or after the filing date D: document cited in the application L: document cited for other reasons S: member of the same patent family, corresponding document			