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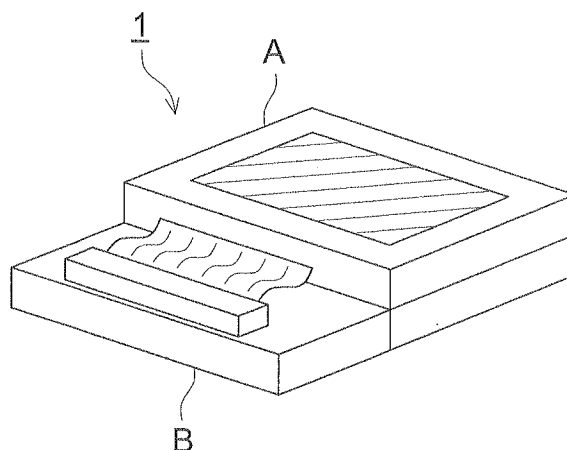
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(54) **Organic electroluminescent element and display and illuminator**

(57) An organic electroluminescent element comprising an anode, a cathode and a component layer including a light emission layer is disclosed.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 10 17 4005

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	US 2002/045061 A1 (HOSOKAWA CHISHIO [JP]) 18 April 2002 (2002-04-18) * paragraph [0109] * * claim 1; compounds 9,11,12,14 * * paragraph [0083] * -----	1-8	INV. C09K11/06 H05B33/14
E	WO 2004/024670 A1 (SANKIO CHEMICAL CO LTD [JP]; KUBO SHINJI [JP]; SHINTOU TAICHI [JP]; AO) 25 March 2004 (2004-03-25) * compounds 1-36 * -----	1,5,8	
E	EP 1 371 709 A (KONISHIROKU PHOTO IND) 17 December 2003 (2003-12-17) * compounds 5-2, 5-3,14-3 * * paragraph [0064] - paragraph [0066] * * paragraph [0020] - paragraph [0021] * -----	1,2,5,8	
A	EP 1 061 112 A (IDEMITSU KOSAN CO) 20 December 2000 (2000-12-20) * claims 13,6; compound 67 * -----	1,5,8	
A	JP 10 168443 A (SANYO SHINKU KOGYO KK; NAKAYA TADAO) 23 June 1998 (1998-06-23) * compound 6 * -----	1,5,8	TECHNICAL FIELDS SEARCHED (IPC) C09K H05B H01L
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 29 December 2010	Examiner Saldamli, Saltuk
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 (P04C01)



Application Number

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due 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 those claims for which no payment was due.

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 present supplementary 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 (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 10 17 4005

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: 8(completely); 1-7(partially)

Organic electroluminescent element comprising carbazole derivatives according to Formula 3.

2. claims: 1-7(partially)

Organic electroluminescent element comprising carbazole derivatives according to Formulae H2-H4.

3. claims: 9(completely); 1-7(partially)

Organic electroluminescent element comprising carbazole derivatives according to Formulae I1-I3.

4. claims: 1-7(partially)

Organic electroluminescent element comprising carbazole derivatives according to Formulae J1-J2.

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

EP 10 17 4005

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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29-12-2010

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	有机电致发光元件和显示器和发光器		
公开(公告)号	EP2248870A3	公开(公告)日	2011-02-02
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[标]申请(专利权)人(译)	柯尼卡株式会社		
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IPC分类号	C09K11/06 H05B33/14 H01L51/00 H01L51/30 H01L51/50		
CPC分类号	C09K11/06 C09K2211/1003 C09K2211/1007 C09K2211/1011 C09K2211/1014 C09K2211/1029 C09K2211/1044 C09K2211/1051 C09K2211/1059 C09K2211/1074 C09K2211/1088 C09K2211/1096 H01L51/0052 H01L51/0059 H01L51/0067 H01L51/0072 H01L51/0081 H01L51/0084 H01L51/0085 H01L51/0094 H01L51/5012 H01L51/5016 H01L51/5036 H01L51/5096 H01L2251/308 H05B33/14 Y10S428/917		
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外部链接	Espacenet		

摘要(译)

描述了包含阳极，阴极和包括发光层的组分层的有机电致发光元件。

FIG. 1

