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2001 10 10

(71)

20 LG

(72)

102 104

501 1302

580 218 - 904

103 1001

107 101

(74)

:

(54)



1 .

*

101 : 102 :

103 : 104 :

105 : 106 :

107 : 108 :

110 :

(Electroluminescence Display Device) ,

, 가 , LCD(Liquid Crystal Displays),
FED(Field Emission Displays), ELD(Electroluminescence Device), PDP(Plasma Display Panels) ., PCS(personal communication service) , , TV
가 가 , 가 .가
(EL;electroluminescence)
(excite state) (ground state), 가 가
, 가
(flexible) .

, PDP , 가 , , 3가 .

, ELD 가 가 , ELD 가 .

, ELD , cd/m^2 가 가 .

1 (), , , , ,

, 2 () .

ITO(indium tin oxide, $\text{In}_2\text{O}_3 + \text{SnO}_2$) ,

(copper() Phthalocyanine) 10 30nm ,

NPD(N,N - dinaphthalen - 1 - yl) - N,N' - diphenylbenzidine) 30 60nm ,

가

Alq3(tris(8 - hydroxyquinolate)

aluminum) 20 50nm ,

30 50nm

Al/Li .

가

(host)

(doping)

Alq3

Alq3

MQD(N

- methylquinacridone)

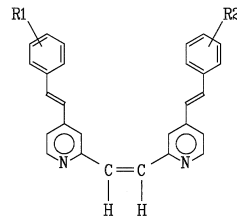
가

1

1

1

1



, R_1 R_2 (H), (alkyl), (alkoxy), (halogen), (aryl), (aryl).

1,2 - (2 -) (1,2 - bis(2 - pyridyl)ethylene)
 (phosphorusoxychloride) (dimethylformamide),
 (tetrahydrofuran), (diethoxyphosphorylmethylbenzene),
 (potassium tert - butoxide).

가

1

1

, (101) ITO(indium tin oxide, $\text{In}_2\text{O}_3 + \text{SnO}_2$) IZO(indium zinc oxid
 e, $\text{In}_2\text{O}_3 + \text{ZnO}_2$) (sputtering) (photolithography)
 (102)

, (102) (110).

(110) (103), (104), (105), (106), (107)

(103) 30nm, (104)

1

, (103) 1

, (104) Alq_3 N - (N - methylquinacridone)
 30nm (105) Alq_3 40nm
 (106), (LiO₂) 25nm (107)

, (110) (shadow mask), (Ca), (Mg), (Al),
 (Cu), (Cr) 100nm, (108)

, , , ()

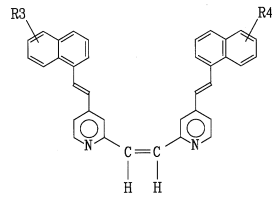
가

2

2

2

2



, R_3 R_4 (H), (alkyl), (alkoxy), (halogen)

1,2 - (2 -)

(diethoxyphosphynylmethyl naphthalene),

가

2

ITO

10 30n

m

2

가

A

lq3 20 50nm

30 50nm

Al/Li

2

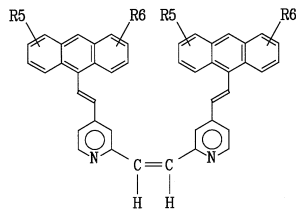
가

3

3

3

3



, R_5 R_6 (H), (alkyl), (alkoxy), (halogen), (aryl), (aryl).

1,2 - (2 -)
ene), - , 9 - (9 - diethoxyphosphynylmethylanthracene),
가 , .

3

, , ITO , 10 30nm
m , 3
Iq3 20 50nm , 가 30 50nm A
, Al/Li .

3

가

가 .

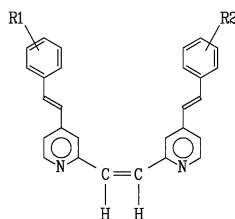
가 , .

(57)

1.

1

[1]



, R_1 R_2 (H), (alkyl), (alkoxy), (halogen), (aryl), (aryl)

2.

1, , , , ,

3.

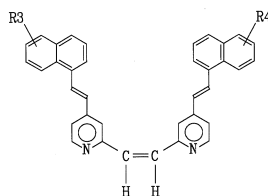
2, 1

4.

,

2

[2]



, R_3 R_4 (H), (alkyl), (alkoxy), (halogen)

5.

4 , , , , , , .

6.

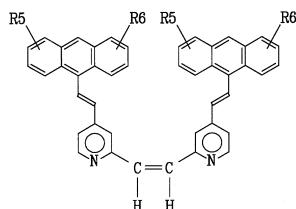
5 , 2 .

7.

,

3

[3]



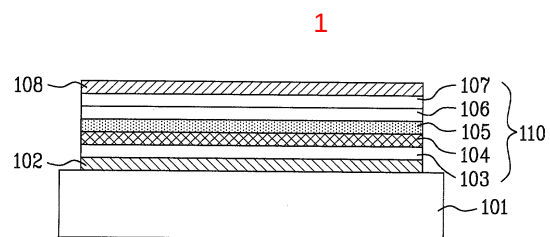
, R_5 R_6 (H), (alkyl) , (alkoxy) , (halogen) , (aryl) , (aryl) .

8.

7 , , , , , , .

9.

8 , 3 .



专利名称(译)	有机电致发光器件		
公开(公告)号	KR1020030029749A	公开(公告)日	2003-04-16
申请号	KR1020010062443	申请日	2001-10-10
申请(专利权)人(译)	LG电子公司		
当前申请(专利权)人(译)	LG电子公司		
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其他公开文献	KR100587292B1		
外部链接	Espacenet		

摘要(译)

本发明涉及具有空穴传输层和具有优异的空穴传输性和热稳定性的化合物的有机电致发光器件，更具体地说，涉及在基板上具有插入阴极和阴极之间的有机层的有机电致发光器件，和含有该化合物的空穴传输层。

1 指数方面 空穴传输层，耐热性，发光效率 - 1 -

