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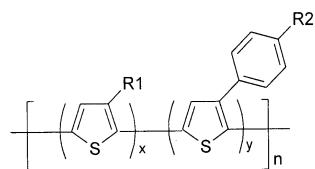
:

(54)

1

가

1



, R1

1

, R2

1

n 1 1,000 가 . 2.000 100,000 , x,y 0 1 가 ,

1

1

2

(DCM2)

(EPMR1)

(polythiophene)

(OELD)

21

가

TV

CRT(Cathode Ray Tube)가

FPD(Flat Panel Display;)

가

LCD(Liquid Crystal Display)

가

가

CRT

LCD

가

가

LD(Organic Electroluminescence Display)

가

가

E

ELD

ELD

ELD가

ELD

ELD

(Eastman Kodak)

, 1963 Pope
(Tang)

(Vanslyke)

ELD

1990

가

1987

PPV

ELD (hole) (electron)가 (recomb
ination) (exition)

ELD 가 , TPD, NPD,
CuPc, MTDATA , Alq3, DTVBi, PBD

, Alq3 (coumarine) , (Quinacri
done) , DCM (rubrene) (dopping)

, (full color) , 가 ,
Alq3 PPV, BUEH - PPV, BeBq2, Almq
PPP, BDOH - PF, Balq, DPVBi, OXD - D

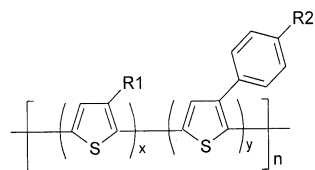
, MEH - PPV, DCM
가

(polythiophene)

(polythiophene)

1

(1)



, R1

1

, R2

1

2,000

100,000

, x,y 0 1

가 ,

n 1 1,000 가 .

R1 R2

, R1 R2 , ,

R1 R2 -OX1 , X1 , , ,

ELD ,

(ELD)

ELD 1 (10), (20), (30)

(40)

(10)

(10) (20) (Indium - tin - Oxide ;ITO)

(sputtering)

(30) 가 (Hole Transport Layer)

(30) (20) (ultrasonication)

10^{-5}

(Spin Coating) 200 1200 500 2000rpm

(40) (30) (Li) (Al) 100 300nm

ELD / / / /

5 ELD 3 가 .

가

가

1

(ITO) (detergent)

10^{-5}

R1 , R2가 , x,y가 0.7, 0.3 가 , n 176 1

700rpm 1000 (30)

200nm .

가 253cd/m² 8V 가 137cd/m² , 10V

2

ITO , 10⁻⁵ 1

thiophene) 1000 (poly(3 - octylthiophene - co - 3 - (4 - fluorophenyl) 1700rpm

(tris(8 - hydroxyquinolino)aluminium 500

10 /sec

200nm ,

9.5V 가 386cd/m² .

()

(ultrasonication) (ITO) (detergent)

ITO , < 10⁻⁶ .

(CuPc, copperphthalocyanine) 200 , 300

(DCM, [4 - (dicyanomethylene) - 2 - methyl - 6 - (p - dimethylaminostyryl) - 4H - pyran]) 200 800

3 /sec

100 300nm (Li 10%)/

EL 9V 가 110cd/m² .

(HTL)

5 (/ / , / /)

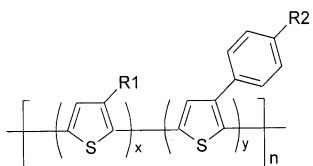
3

(57)

1.

1

(1)



1

R2

1

x,y 0 1 가 , n 1 1,000 .

2.

1 ,

가 , , , , , .

3.

1

가 , .

4.

1,

•

5.

1,

가 - 0X1 .

6.

5

X1

1

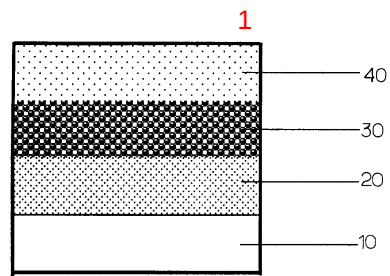
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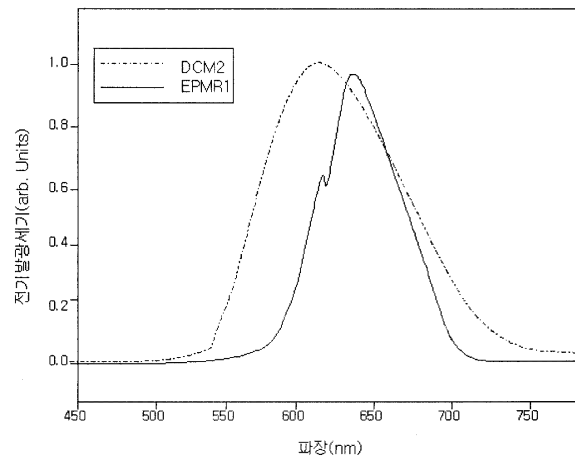
1

200

1200



2



专利名称(译)	用于红色有机发光器件的聚合物化合物和使用其的发光器件		
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[标]申请(专利权)人(译)	ELIATECH		
申请(专利权)人(译)	电梯技术有限公司.		
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代理人(译)	CHO , TARM PARK MI SOOK		
其他公开文献	KR100410876B1		
外部链接	Espacenet		

摘要(译)

本发明涉及用于红色发光材料的聚合物和使用该聚合物的有机发光装置，该有机电致发光装置由下面的化学式1表示。并且在本发明中，所提供的聚合物具有优异的红光发射。有机电致发光器件具有空穴传输能力。这里，R1是氢原子，选自卤原子，烷基，链烯基，环烷基，烷氧基，芳香烃基，芳香酯环化合物的R2是一种选自氢原子，卤原子，卤代烷基，烷基，链烯基，烷氧基，芳烃基，芳香杂环化合物。在本发明中，所提供的化合物的平均分子量包括2,000至100,000，x，y是1至0之间的比率，n是1至1,000的值。

