

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. 7
H05B 33/14

(11)
(43)

2003-0035021
2003 05 09

(21) 10-2001-0066880
(22) 2001 10 29

(71) 575

(72) 601 1501

650 411/1805

1 116 802

(74) :

(54)

2 , 1 ,
가 , 1 1 가

3

1

2a , 2b
3
4 (SY) (Red B)
5 /
PL
6
7

[]
가 가
[]
L(Electroluminescence) EL E
가 가
1998-51814
5,998,085 , 6,214,520 6,114,088
(5,220,348 , 5,256,506 , 5,278,023
5,308,737).
가 (5,998,085).
6,117,567
2001-3986), 가 5,965,281 가 (

가

(full color)

가

1

2

2

가

1

가

가

가

가

1

가

1

S1

S2가

S1

S3

가

S3 (W₂₃) S1 가 S2 (W₁₂) (W₂₂), S2
 (Y₁, Y₂, Y₃) (Y₁₂, Y₂₃)

$$W_{12} = Y_1 + Y_2 - Y_{12}$$

$$W_{22} = 2 Y_2$$

$$W_{23} = Y_2 + Y_3 - Y_{23}$$

가 가 , 가
 가 가
 (energy transfer)' 가 (,) , 가 (, 가)
 R, G, B 가 , 가
 가 가
 가 가
 (polystyrene), (polymethylmethacrylate), (poly(styrene-bytadione) copolymer), (polyalphamethylstyrene),
 (styrene-methylmethacrylate copolymer), (polybutadiene),
 (polycarbonate), (polyethyleneterephthalate),
 (polyestersulfonate), (polysulfonate), (polyarylate),
 가 가

SY, RB, SY, RB가 (host), (dopant) 가 SY, RB가 SY, RB가 4, SY, RB 500 nm, 700 nm SY가 RB가 가 RB 7 RB가 25 % RB 6 7

2

2 2 EL (Covion, AEF 2009 amp; 2045), 가 (Sigma-Aldrich, 2,500, PS) 2,000 50,000 가 (edge roughness)가 60 3 15 UV-O 3 80 nm (ITO, ITO) (HTL)(Bayer, PEDOT/PSS)

가 가 0.333 < < 0.675, 0.375 < PS < 0.667 (edge roughness) 5 μm 1 2

1

: ITO/HTL(50 nm)/Red2009:PS(1:1)/Ca(30 nm)/Ag (250 nm)

	m)	(rp ()	- (V)	(100 Cd/m ² (V)	100 Cd/m ²	CIE(1931)	
						x	y
CR/PS(#1)	2000	800	4.5	7.5	0.78	0.6601	0.3383
CR/PS(#2)	2000	800	4.0	7.0	0.83	0.6628	0.3354
CR/PS(#3)	2000	800	4.0	6.5	0.77	0.6605	0.3376

2

: ITO/HTL(50 nm)/Red2045:PS(1:2)/LiF(1nm)/Al(250nm)

	()	- (V)	100 Cd/m ² (V)	100 Cd/m ²	CIE(1931)	
					x	y

5. 6. ,

1 < 0.7 , 2 가 0.3 < 1 < 0.8, 0.2 < 2

< 0.7 가 < 0.7 .

7. 8. ,

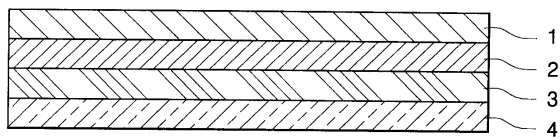
$\frac{1}{0.7}$ 가 , $\frac{2}{0.7}$ 가 $0.3 < \frac{1}{0.7} < 0.8$, $0.2 < \frac{2}{0.7}$.

10 **11.** ,
가 $0.375 < \text{가} < 0.667$.

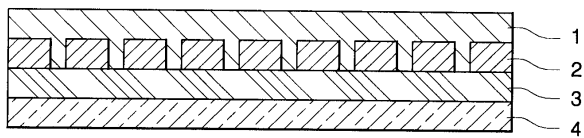
12 **13.** ,
가 $0.375 < \text{가} < 0.667$.

14 **15.** ,

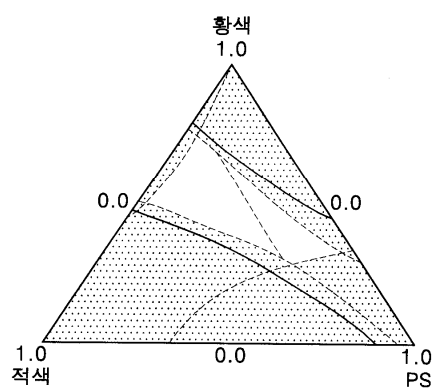
2a



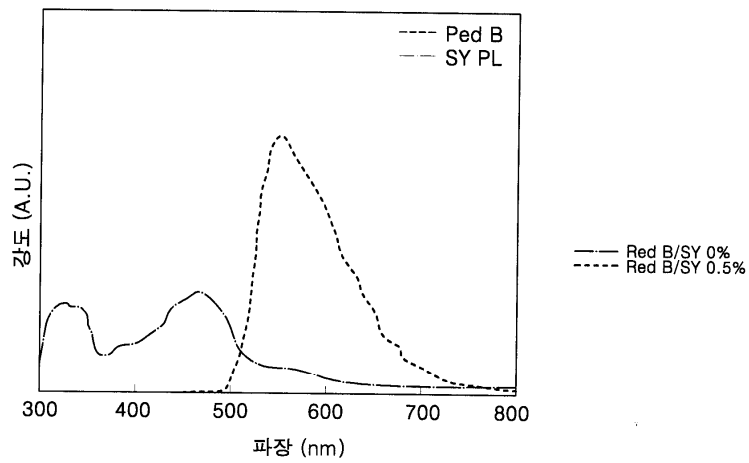
2b



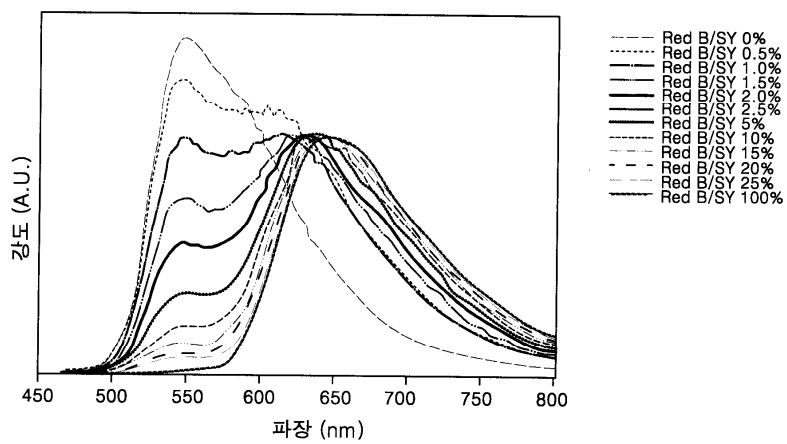
3



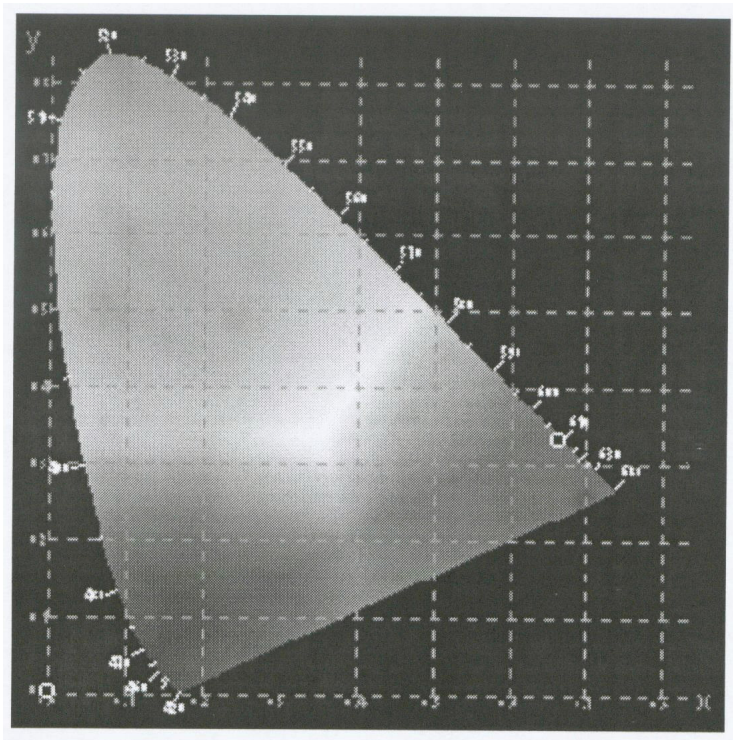
4



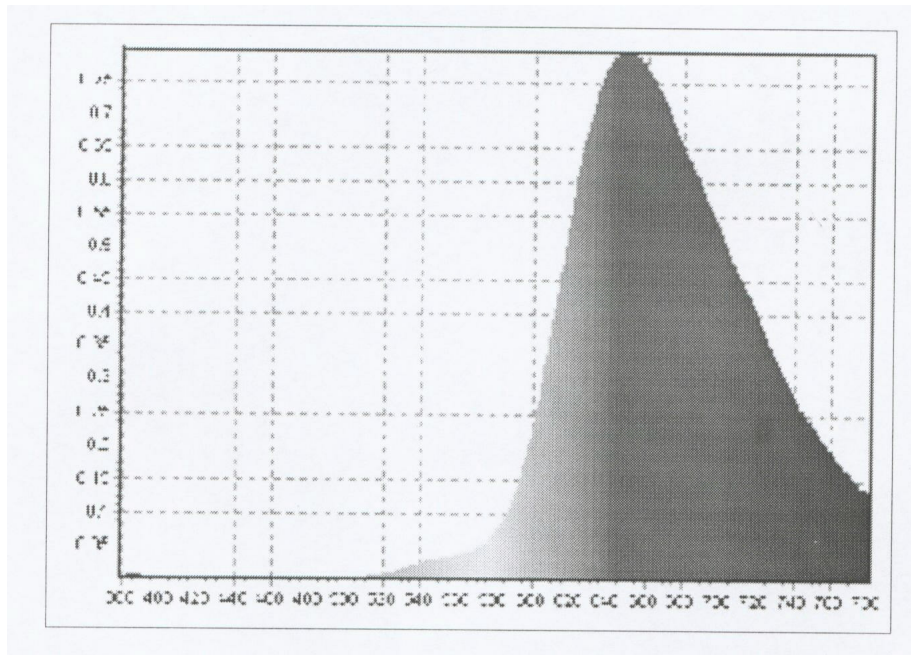
5



6



7



专利名称(译)	用于有机电致发光器件的聚合物发光混合组合物和使用其的有机电致发光器件		
公开(公告)号	KR1020030035021A	公开(公告)日	2003-05-09
申请号	KR1020010066880	申请日	2001-10-29
申请(专利权)人(译)	三星SD眼有限公司		
当前申请(专利权)人(译)	三星SD眼有限公司		
[标]发明人	KIM MUHYUN 김무현 KWON JANGHYUK 권장혁 SUH MINCHUL 서민철		
发明人	김무현 권장혁 서민철		
IPC分类号	H01L51/00 H01L51/56 H05B33/14 C09K11/06 H01L51/50		
CPC分类号	H01L51/56 C09K2211/1408 H01L51/5012 C09K11/06 H01L51/0038 H01L51/0037 H01L51/0039 C09K2211/14 H05B33/14 C09K2211/1441 H01L51/0013 Y10S428/917		
代理人(译)	PARK, 常树		
其他公开文献	KR100478521B1		
外部链接	Espacenet		

摘要(译)

用途：提供高分子发光混合复合物，以改善色纯度和发光特性，并在制造全色高分子有机电致发光器件时图案化高聚合物发光层。组成：高分子发光混合发光复合材料包括至少两种界面性质不同的发光高聚物，它们显示出不同的发光区域，并且在第一发光高聚物的发光光谱区域与吸引光谱之间存在重叠区域第二发光高聚物的区域。高聚物发光混合发光复合材料包含光学无活性涂料。

