

(19) (KR)  
(12) (A)

(51) . Int. Cl. <sup>7</sup> (11) 2002 - 0066321  
H01L 51/20 (43) 2002 08 14  
H05B 33/04

(21) 10 - 2002 - 7002839  
(22) 2002 03 02  
          2002 03 02  
(86) PCT/US2000/24126 (87) WO 2001/19142  
(86) 2000 09 01 (87) 2001 03 15

(81) : , , , , , 가 , ,  
EP : , , , , , , , ,  
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(30) 60/152,536 1999 09 03 (US)  
  
(71) , .  
93117 6780  
  
(72) 93117 114 - 117  
93103 #2041201  
93105 3025  
  
(74)

(54)

가

, , , , ,

, , ,

가  
가  
가

(electrophotoactive)

가

가

nd)

/ (idium/tin)  
(pi - ba

(strontium)

( )

가

가

가

(Kawami)

5,588,761

( , 85 ) , 가

가

가 , 가 300

가 , , , 가

, 1 " " 2 ( , ) 1 가 ( , )

1

2 85

3

4

1 가 , (100) (116, 118) (112)

(114) (110), (120),  
 (122) (110) (124)  
 (128) (122) (126)  
 (130) (124) (134), (122)  
 (132)

(122) 가 3 가 , 가  
(polyethylene terephthalate) , 가  
가  
( , ) .

가 가 가  
가 가  
가  
(zeolite)  
가

[Tri - sorb,  
(Sued - Chemie)  
가 ]

(barium)

가 . . . . . 가

가 가

4) (Polyquinoline)가  
 (C. Zhang), . . . (H. Von Seggern), . . . (K. Pakbaz), . . . (B. Kraabel),  
 . . . (H.W. Schmidt) . . . (A.J. Heeger) Synth. Met., 62,35(1994)  
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가 가

(112) / [  
 (H. Burroughs), . . . (D.D.C. Bradley), . . . (A.R. Brown), . . . (R.  
 N. Marks), . . . (K. Mackay), . . . (R.H. Frend), . . . (P.L. Burns)  
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 가 (J. Gao), . . . (A.J. Heeger), . . . (J.Y. Lee) . . . (C.Y. Kim) Synth. Met., 8  
 2,221(1996), . . . (Y. Cao), . . . (G. Yu), . . . (C. Zhang), . . . (R. Menon) . . . (A.J.  
 Heeger) Appl. Phys. Lett. 70,3191(1997)  
 (emeraldine salt) (polyaniline) 2  
 가

(114) , ,  
 (ytterbium) , ,  
 9 ) ( 5,047,687 , 5,059,862 5,408,10  
 . . . [ 5,151,629 , 5,247,190 ,  
 5,317,169 . . . (J. Kido), . . . (H. Shionoya), . . . 가 (K. Nagai) Appl. Ph  
 ys. Lett., 67(1995)2281] 200 5000 . . . 200 500  
 ( ) [ 5,512,654 ; . . . (J.C. Scott), . . . (J.H. Kaufman), . .  
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 J. Appl. Phys., 79(1996)2745 ; . . . (I.D. Parker), . . . (H.H. Kim) Appl. Phys. Lett.,  
 64(1994)1774] ( ) . . . 가  
 가

200  
 , 100

가  
 가

[ (Y. Cao) (G. YU) 08/872,657 ]

, , (Y. Cao) 1999 10 12 PCT  
US99/23775 ).

가

[ 1]

[ (tri - sorb)]  
가

, , [ (Beren)  
(United Catalysts Ink.) , , (Sued - Chemie)  
(Sued - Chemie Performance Packaging) 가 ]

[ (Ciba Specialty Chemicals Corp.) (East Lansing)  
(Araldite) 2014]

(100) 가 2014

, , 50 , 가 85  
85 300 2% 2 가

, 2 , , ( ) [ (BaO) ; ( ) 5,882,76 )]  
가

[ 2]

, 85 /85%

3

,

300

5%

1

3

,

(

5,885,761)]

가

[ 3]

가

1

2

3

[ 4]

가

가

가 (

400 ).

4

가

,

8

5

가

(85

,

3

)

가

,

가

가

가

(57)

1.

(112, 114)

(120)

(1

10) ,

(132)

가

(12

4) ,

(130)

,

가

가

,

2.

(112, 114)

(120) 가

(110)

가

가

(130)

(124)

3.

1 / 2 , , 가

1

4.

1 / 2 , /

5.

<sup>1</sup>      /      <sup>2</sup>      ,      /      .

6.

1 / 2 .

7

1 / 2 ,  
/ .

8.

$$1 \quad / \quad 2 \quad , \quad \quad \quad /$$

9.

1 / 2 , , 가

10.

$$1 \quad / \quad 2 \quad , \quad \quad \quad /$$

11.

$$1 \quad / \quad 2 \quad , \quad \quad \quad /$$

12.

1 / 2 , / .

13.

1 / 2 , / .

14.

1 / 2 , / .

15.

1 / 2 , / .

16.

1 / 2 , / .

17.

1 / 2 , / .

18.

1 / 2 , , / .

19.

1 / 2 , , , , , / .

20.

1 / 2 , / .

21.

1 / 2 , / .

22.

1 / 2 ,  
/ .

23.

1 / 2 , / .

24.

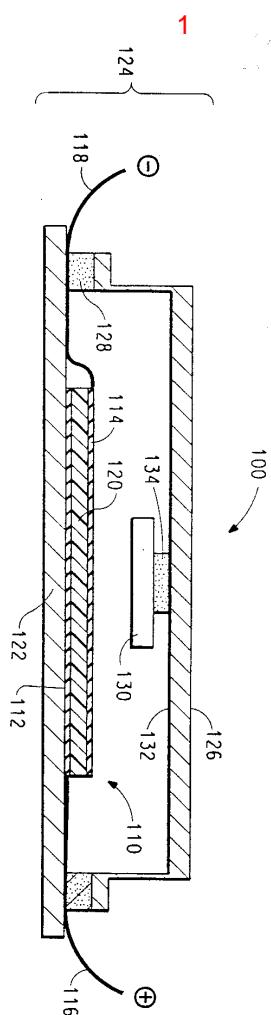
1 / 2 , / .

25.

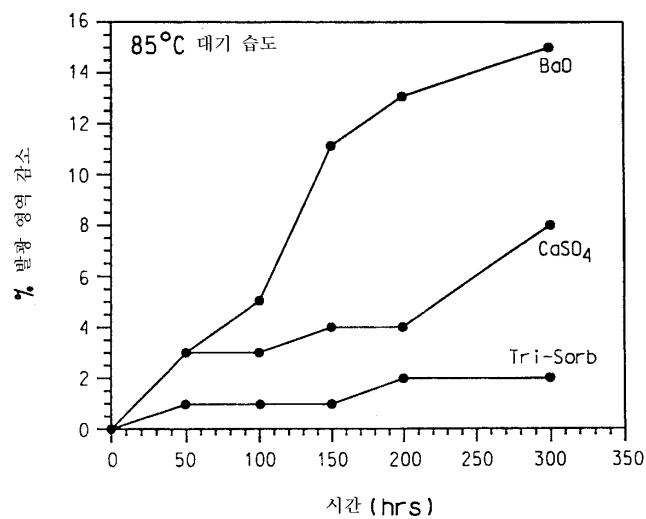
1 / 2 , / .

26.

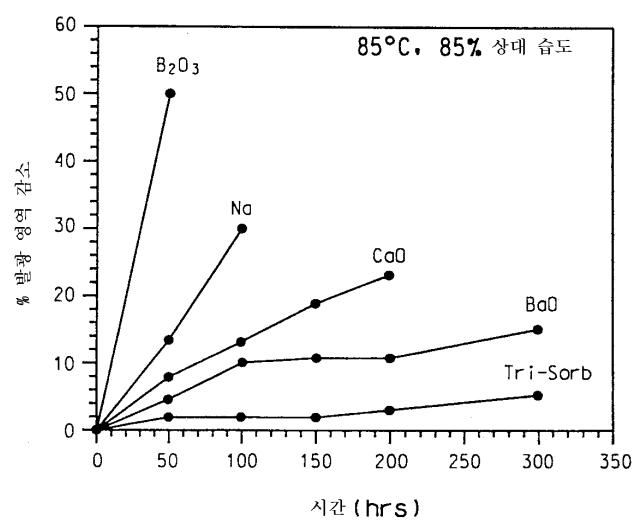
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