

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl.<sup>7</sup>  
G02F 1/1335

(11)  
(43)

10-2004-0019032  
2004 03 04

(21)10-2003-7017233  
(22)2003 12 30  
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(86)PCT/US2002/011962  
(86)2002 04 17

(87)  
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(30)09/897,3182001 07 02(US)

(71)55133-3427. . 33427

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(74)

:

(54)

K- KE 가  
가

2

,

,

,

(twisted nematic)

가

(front) (rear)

0 90

(glare)

가 (compact)  
가

가 (black spot)'

( 가 ) 가 가  
가 가

2

'2 (dichroism)'  
. 2

2가 . 2

2 H- ( ) 2 (dyestuff) , H- (chromophore)

H- , H-

(cladding),

(intrinsic) (encapsulated) H- 2

K-

가 5

K- (PVA)

2 K- 2 가 ,

가 K- (very neutral)

KE K- (3M Company, ) PVA

KE H- , KE

PVA

H- 2 , ( 2 )

가 KE , KE

K- KE , 가

가 85 85%

가 K-

가 K-

(PET)가 가

가 K-

1/4 (quarter)- 1/4 (retarder)

1/4- 1/4

가

2 (L) (R)

(100) 1 (102)

(104, 106) 2  
 (108, 110), H-  
 (112, 114, 116, 118)  
 (120, 122, 124, 126)  
 (32),  
 (100)  
 (transflector)  
 (30)  
 H- (108, 110) 가 20 가 25  
 80 가 5 (100)  
 가 455  
 KE  
 (PET) 20 25 KE  
 < >  
 K- KE  
 1 가 1 가  
 가  
 (tilted) 1 2 가 2  
 1  
 2 가 2 1  
 K-  
 K- K-  
 K-

, .

가 가 가  
K- 가 K-  
가 가

. ,  
 .

- 1
- 2
- 3
- 4 3
- 5 4
- 6
- 7
- 8 6
- 9 8
- 10
- 11
- 12 10 11
- 13
- 14A-14C
- 15

, (encased)  
 2 (50) (10) (52) (50) ( Polatechno) AD-20 1 (54, 56) (

(58), K- KE (56) (52)  
 . K- (58) 20 . KE  
 (PET) (60) (58) PET (60) 2  
 5-180 , KE 가 (50) PET (60)  
 (54) (50) , (62), K- KE 20  
 . (52) , K- (62)  
 K- (64) (62)  
 , H-  
 , PET (60) (64) 2 (50)  
 1 (10) 300  
 , (50) K- 가  
 K- 가  
 (MVTR) ASTM F1249 20 gm/m<sup>2</sup> / , (02GTR) ASTM  
 D3985 1 ml/m<sup>2</sup> / PET , KE  
 MVTR 4.6 gm/m<sup>2</sup> / , 02GTR 0.005 ml/m<sup>2</sup> / (20 90%  
 ).  
 , 가  
 5 K- ,  
 3 (80) (80) ( 가  
 82), K- KE (80) 가  
 (86) (84), 15-35 , (84) 16-  
 , KE (82) 25-50 , KE (82) (90) PE  
 35 (86) (86) (82)  
 T (88) (92) (82) . KE  
 PET , 가  
 (90) 가 8-20  
 (90) PET (88) STR400 PET (Teijin)  
 (Nippon Paper) (92) 4-20 , PET (88)  
 12-100  
 4 3 (94) (94) PET  
 가 (90) (82) 가 20 (95)  
 5 3 (96) (96)  
 (98) (82) PET (88) 가 12-40  
 (98) PET (88)  
 (82) 가 가  
 (98)  
 6 (100) (102),  
 1/4 (quarter) - (104), ,

02) (100) 가 (107) (1  
 ad band) 1/4- , 1/4- , 1/4- (bro  
 (102) 30-60 25-50 (104) 16-35  
 , (107)

08) (106), K- KE (102) (1  
 5-30 KE (106) 15-35 , (108)  
 .

(112) PET (110) (114) (106)  
 가 1 (112) (Kynar) 1702  
 , PET (110) . PET (110)  
 (92) 5-30 , PET (110) 12-100

(106) (102) 가 7  
 , (202) (L) (204) (R) (206)  
 (202)가 (200) ,  
 , (204) (106) (102) , (206)  
 (206) (206) , (handedness)  
 (106) (102) , (202) (204)  
 (200)  
 (106) (102)  
 (210)

8 6 (120) (120) PET  
 , 가 (112) 1-6 (113) (106)  
 (113)

9 6 (130) (130)  
 , (102) (108) (106) (132)  
 가 100 (132) 6 (102)

10 , 가 (140)  
 (140) , (Light Intensifying Film Technology, LIFT)  
 (142) K- KE (144) 5,8  
 86,799 , LIFT PET (150) (148)  
 (146) . LIFT (142) (152),  
 (144) (154) (156),  
 (144) . LIFT (142)

11 , 가 (160)  
 (160) , (Tilted Mirror Film, TMF) (162) K- K  
 E (164) . TMF 162 PET (170) (16  
 8) (166) . TMF (162) (172),  
 K- (164) (174)  
 (176), K- (144)  
 , (171) (176)

12 10 11 , 가  
 (180) , (184)

(182) (182)  
 (182) K- (184) ,  
 .  
 (184) (188) (non-depolarizing)  
 (186) (182) , PET (190) (192),  
 . (182) K- (184) ( )  
 ) (Transphan  
 )  
 13  
 (300) (300) , (ITO) (306, 308)  
 (304), (302)가 K- (312) ( )  
 310) (302) (304, 306, 308)  
 14A - 14C (320)  
 . 14A (324) ( ) (3  
 22), K- KE (322) 14B , (324) (326) ( )  
 (322) (326) (326) (328) (3  
 324) 28) (330) (326) 가 ( 14C). (328) 가  
 , (326)  
 (330)  
 15 (400)  
 (402) , (non-inverti  
 ng) (106) (402) (402) (114)  
 (secular)

(57)

1.

2.

1 ,  
 가

3.

1 , 가 K-

4.

1 , 가 KE

5.

1 , 가 1 ,  
 가 1  
 가

6.

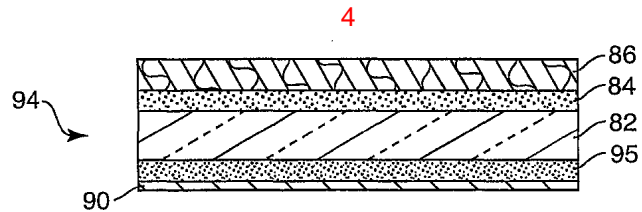
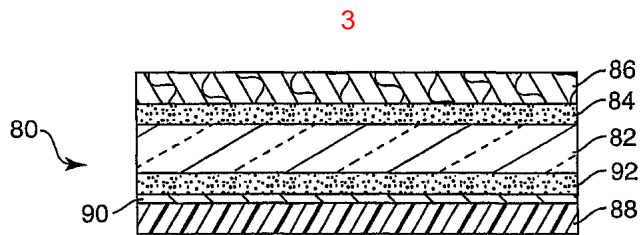
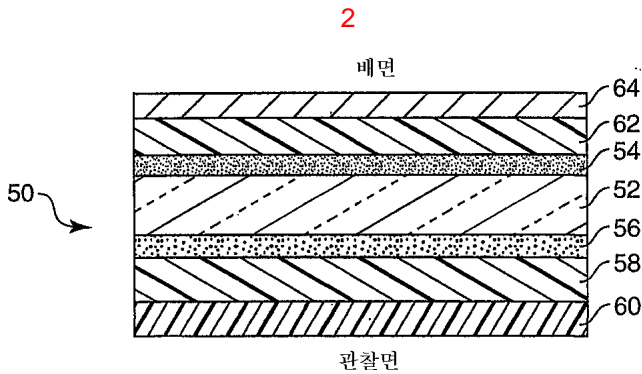
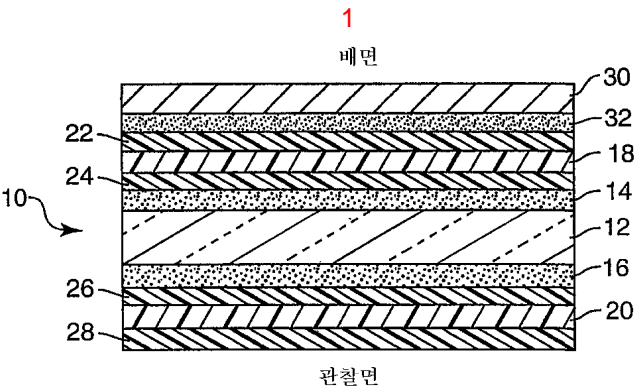


- 5 , .
- 7.
- 6 , .
- 8.
- 1 , 가 가 .
- 9.
- 1 , 가 .
- 10.
- 1 , 가 .
- 11.
- 2 , 가 .
- 12.
- 2 , 가 .
- 13.
- 1 , 가 .
- 14.
- 13 , 가 .
- 15.
- 13 , 가 (tilted) .
- 16.
- 13 , 가 .
- 17.
- 2 , 가 가 2 1 2 , 가 , .
- 18.
- 2 , 가 .
- 19.
- , 2 1 2 , .
- 20.
- 19 , 가 K- .
- 21.
- , , K- K- , .

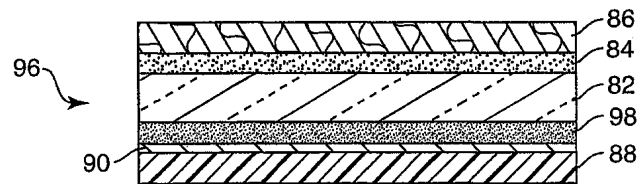
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23.

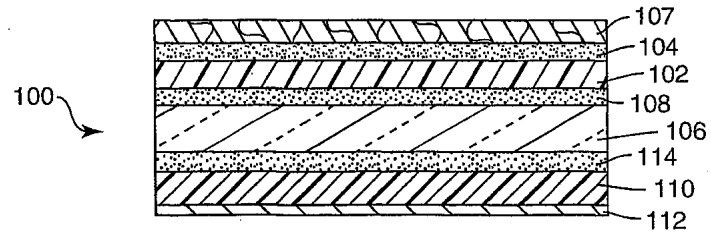
1, 가



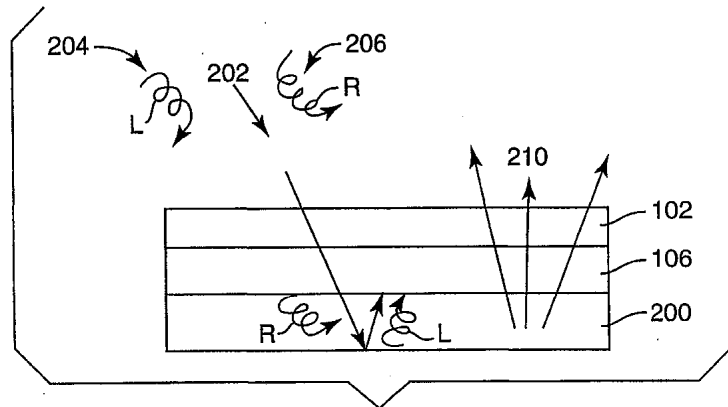
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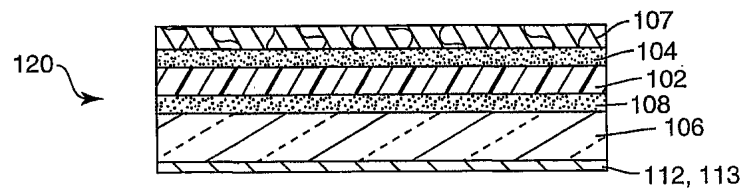
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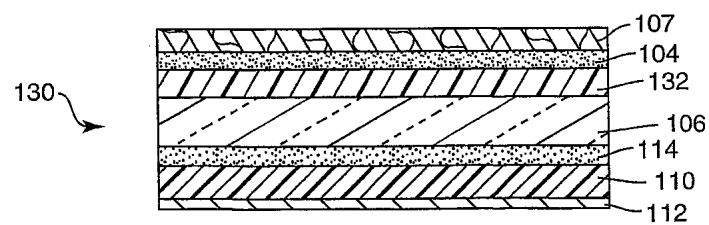
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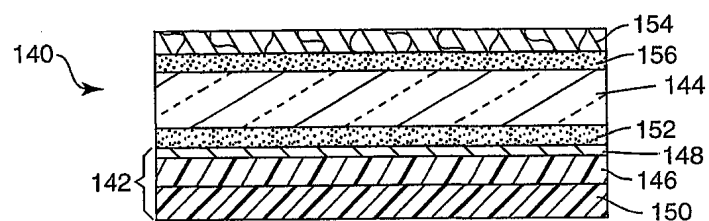
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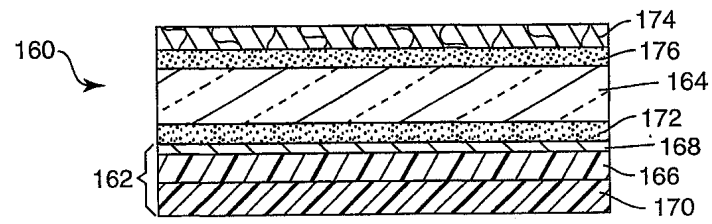
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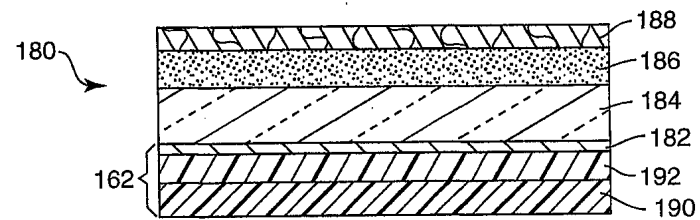
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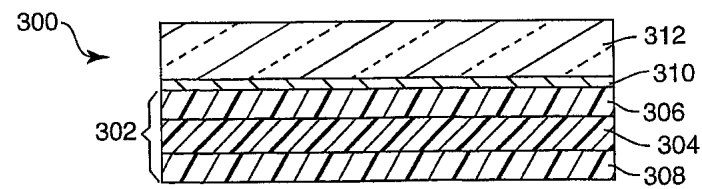
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12



13



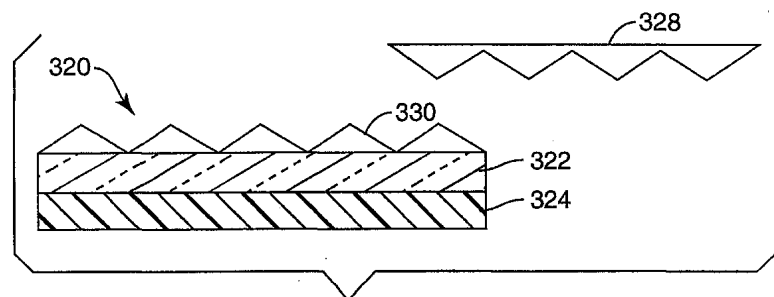
14A



14B



14C



15

