

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
G02F 1/13363

(11)
(43)

2003-0089499
2003 11 21

(21)

10-2003-0031158

(22)

2003 05 16

(30)

02010984.9

2002 05 17

EP(EP)

(71)

64293

250

20

(72)

452

2

63

31

152

45

107-1501

141702

77

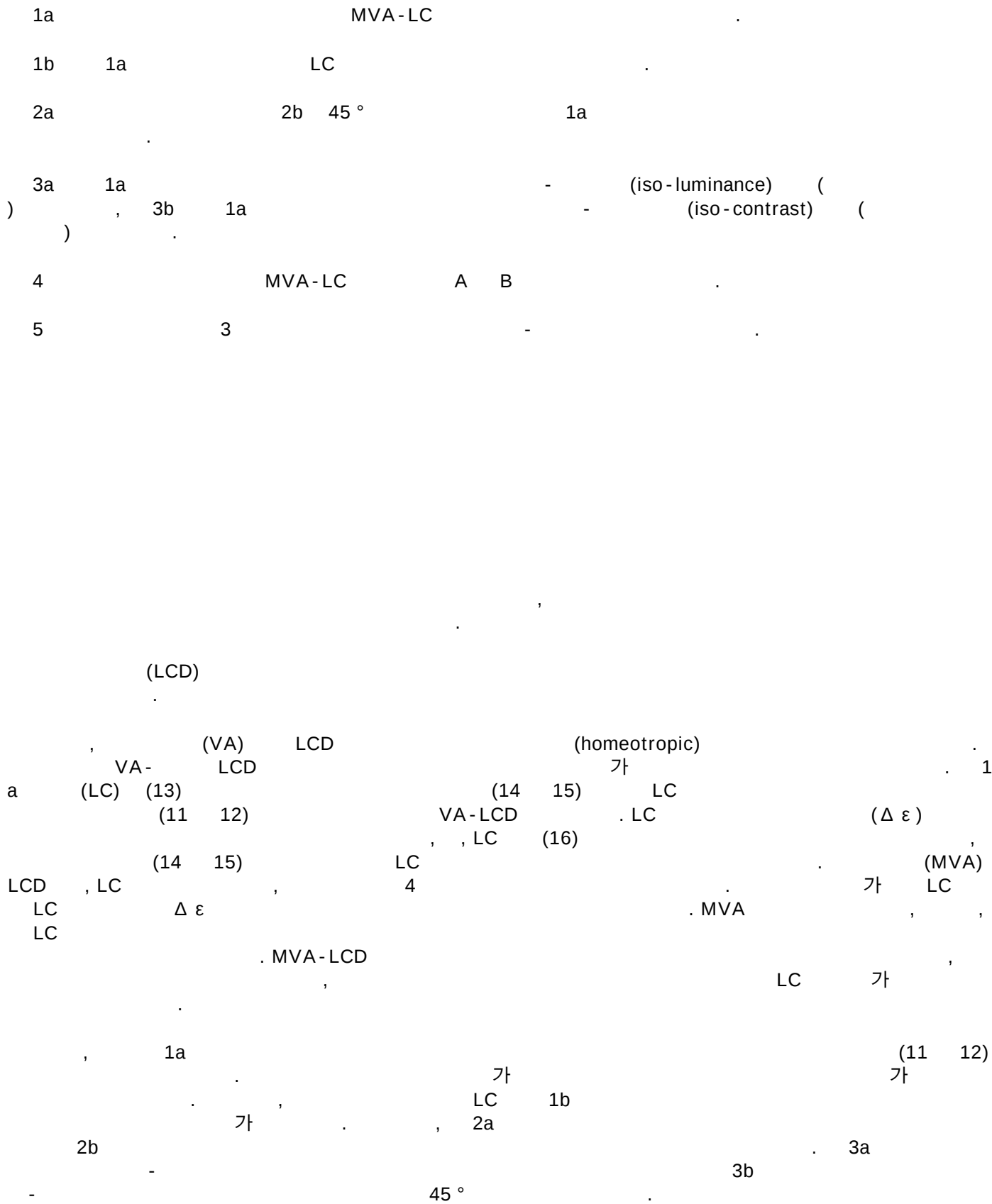
14

174

(74)

:

(54)



VA-LCD [Ishin
abe, T. Miyashita, T. Uchida and T. Fujimura, Y, 'A wide viewing angle polariser and a quarter wave plate wi

th a wide wavelength range for extremely high quality LCDs', Proceedings of the AD/IDW 2001, p485]

2 1 , A- C-
가 LC C ('A- 'C-). VA
4 μ m VA 가 C- 가

US 6,281,956 US 6,141,075 1 2 가 LC ,
가 VA-LCD 1 2
2 가
1 2 , (TAC)

), TAC (product) , (Δn) (d)
가 , 2

LC , UV
가 C- LC(CLC) (UVCLC) C , WO 01/2039
3 A- , C- O-
A- UVCLC O- LC C-
VA LCD LC . WO 01/20393 TN
LC

3 (stack) LC
(piece-to-piece) 가
가 A- (roll-to-roll)
A- LC UVCLC 가

VA LC 가 LC ,
LC

VA LCD

2

가

가

(mesogenic)

(calamitic)
(discotic)

1 ()

()

0 90° (θ)

0 90° ,

가

1

φ 1

'A 1
_____ ('a-)

'C 1
_____ ('c-)

'O ' 1 , (_ oblique)

' A/C ' 1 A C '+A/C A
C '-A/C A/C 1
LCD, DAP() VA() LCD,
ECB(), CSH(), VAN VAC()
, MVA(-) PVA()
, R-OCB(OCB), HAN() OCB(- (π -) , 가 TN(
) , HTN() STN() , AMD-TN(
TN) TFT' IPS()

VA, MVA, PVA, OCB -

A

C

A

(PET),

(PVA)

(PC)

1

C
01,028

DAC

TAC

1

US 5,480,964

US 5,395,918

, US 5,196,953

US 4,7

:

- A C ,
- 가 LC ,
- LCD 가 LC ,
- 가 LC ,
- 가 LC(CLC)
- ,
- CLC 가 250nm ,
- 가 0.1 $3\mu\text{m}$, 0.5 $1.5\mu\text{m}$,
- 가 1 $4\mu\text{m}$, 2 $3\mu\text{m}$,
- 가 30 200nm, 50 150nm ,
- 가 50 400nm, 100 250nm .

1

가 LC

WO 98/04651

LC

A
/20394

UVCLC

A

GB 2,315,072, WO 01/20393

WO 01

UV

LC, LC(CLC) C .

, UVCLC 가 .

LC , LC 가 .

2 , LCD 가 .

4 가 LC , 1 (11) 2 (12) 2 (18) 가

가 LC (13) , (17) (17) (18) LC,

UV LC(CLC) C (: UVCLC) (17

18) 4 LC (13) .

LC , 2 .

, C UVCLC , A

90° LC LC A 가

LC 3 , , 1 O , 1 A

1 C , WO 01/20393

, LC .

LCD , LCD .

, : ,

- 2 , 2 2 가 , 2

- 1 ,

- 1 2 ,

- (

). 가 LC , LCD가 LC 가

, LCD (VA), VA(MVA) VA(PVA) .

LCD (: LC), ,

. LC , 2 LC

LCD 가 , , (: A, O C)
 가 , , 가 LC
 LC US 5,619,352, WO 97/44409, WO 97/44702, WO 97/44703 WO 98/12584
 LC WO 98/00475 LC WO 98/04
 651

LCD , 1
 LC 가 LC
 2

가 LC
 , WO 01-20394, GB 2,315,072 WO 98/04651
 , 가 LC ,

UVCLC , 가 LC 가
 , 가 - 가 ,
 LC , 가 LC 가

가 LC 가 가 ()
) 가 ()

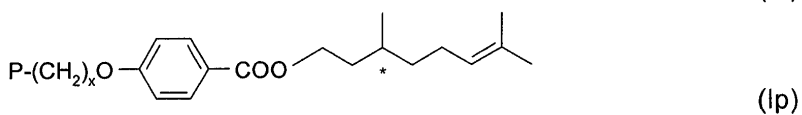
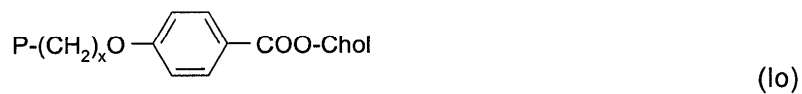
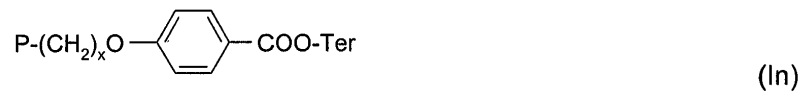
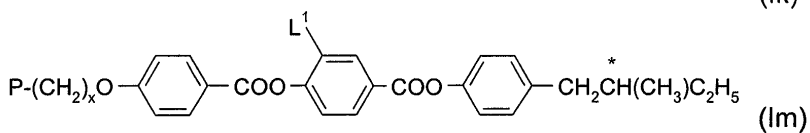
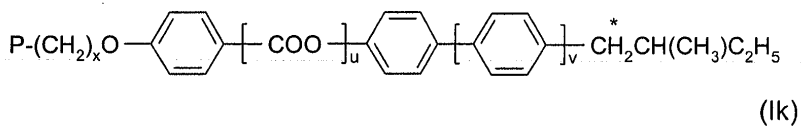
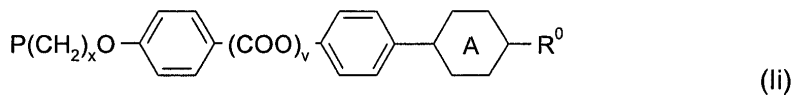
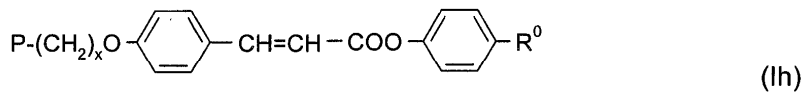
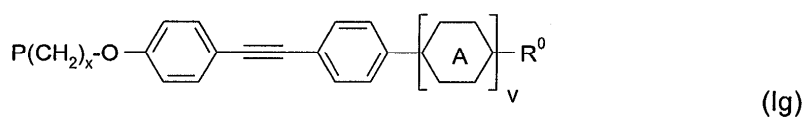
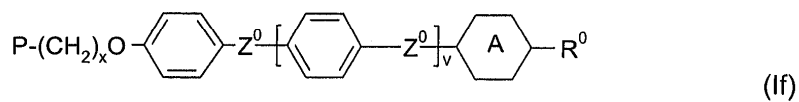
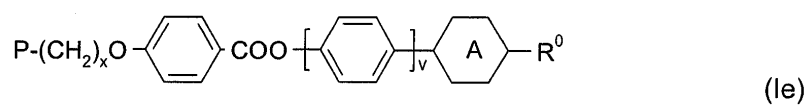
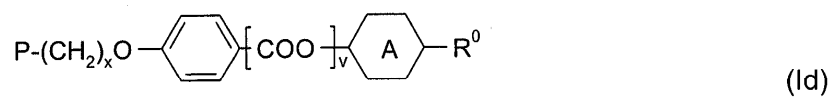
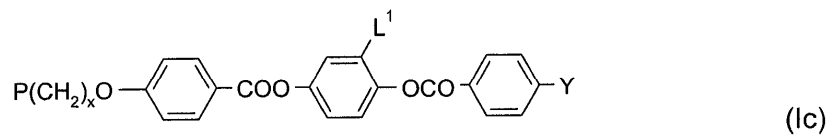
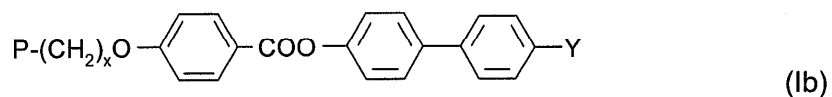
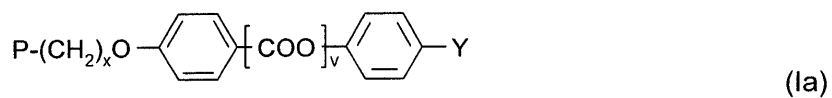
가 , 3 가 LC

가 ,

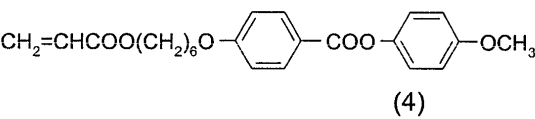
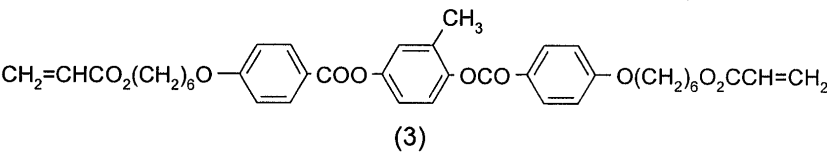
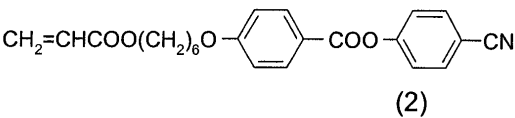
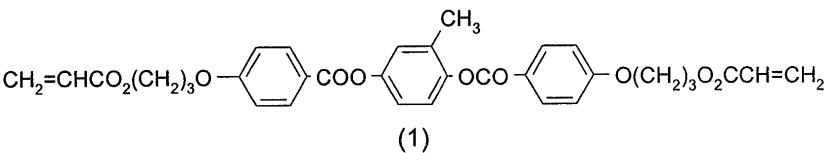
가 ,
 (: [Houben-Weyl, Methoden der organischen Chemie, Thieme-Verlag, Stuttgart])
 WO 93/22397; EP 0 261 712; DE 19504224; DE 4408171 DE

4405316

가



[illegible]



(2) (4) [D.J. Broer et al., Makromol. Chem. **190**, 3201-3215 (1989)]

(1) (3) WO 93/22397

가 LC756 (가 ((BASF AG) FC 171)
907 ((AG) (3M)

WO 01/20394

3

140nm

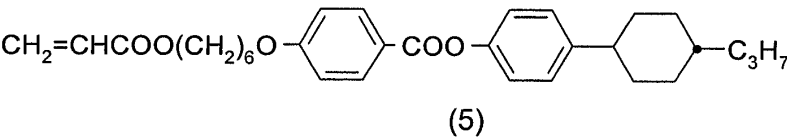
2.5

μm UV C

2-

가

(1)	42.25%
(2)	32.86%
(5)	18.78%
가 907	5.63%
FC171	0.48%



(5) GB 2,280,445

WO 98/04651

1

90nm

0.8μm

UV

A

3

LC 1 PVA TAC , - - .
99.95% 43% .
LC 2 , 90 ° ,
LC 가
2 4 VA-
5 .

가 , LC , VA

(57)

1.

2.

1

2

가

가

3.

1

2

가

4.

1

3

가

5.

1

4

가

6.

5

가 250nm

7.

1

6

가 0.5 1.5 μ m .

8.

1 7 ,

가 2 3 μ m .

9.

1 8 ,

가 50 150nm .

10.

1 9 ,

가 100 250nm .

11.

1 10 .

12.

2 가 1 10 .

13.

12 ,

- 2 , 2 가 , 2 ,

- 1 ,

- 1 2 ,

- , 1 10 ,

가 , , , .

14.

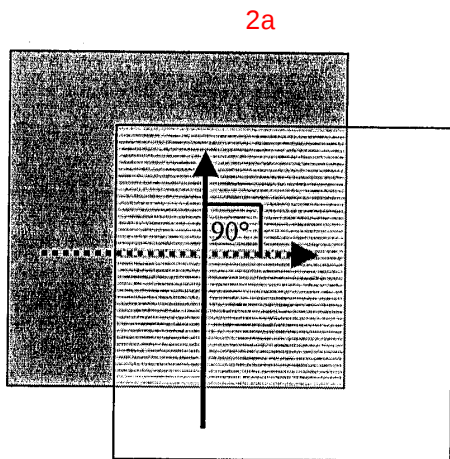
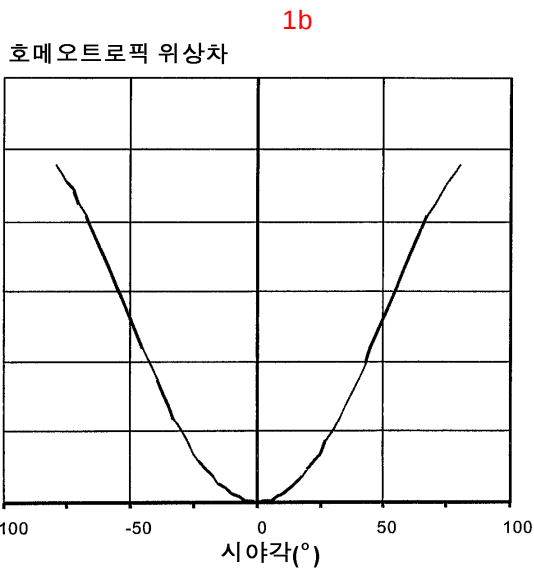
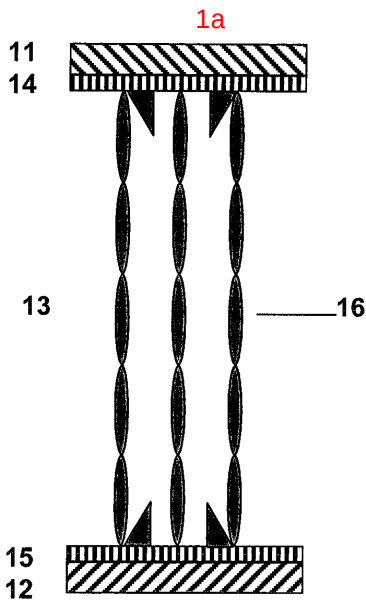
12 13 ,

가 , 가 가 (homeotropic) .

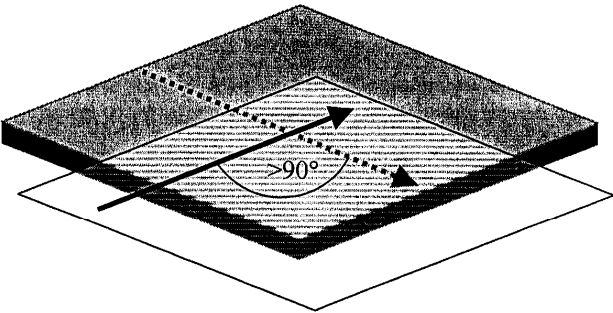
15.

12 15 ,

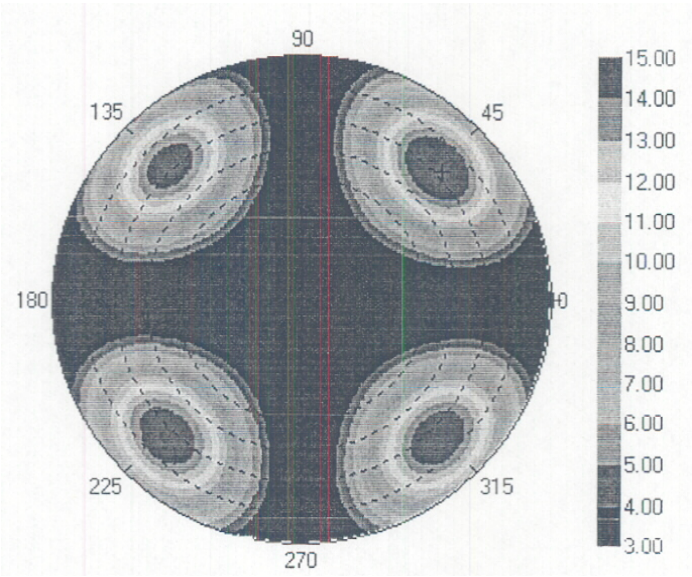
(VA), VA(MVA) VA(PVA)



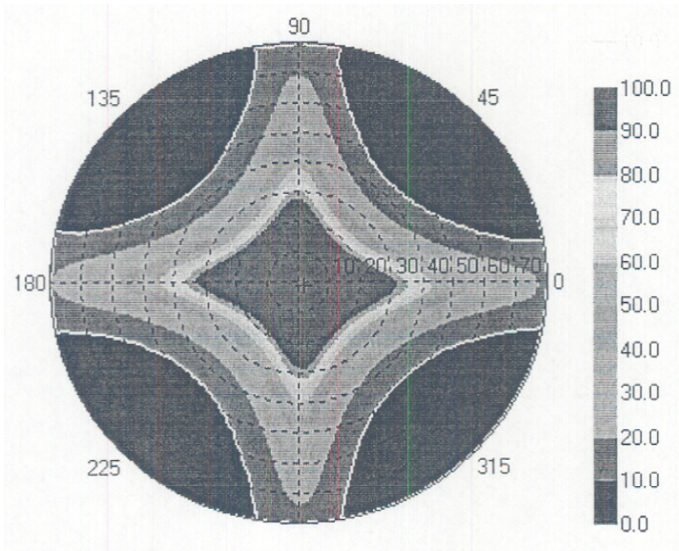
2b

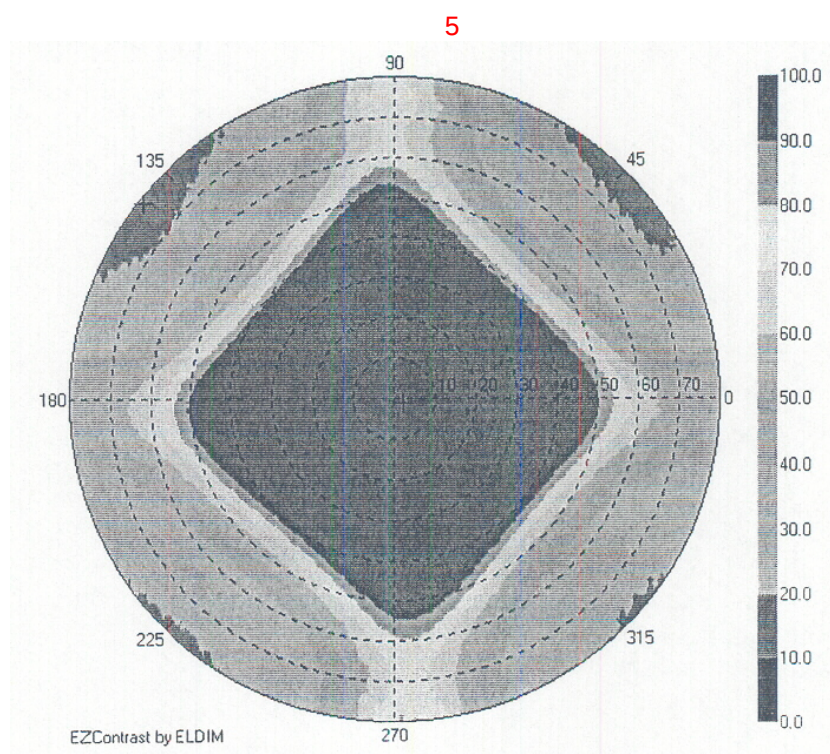
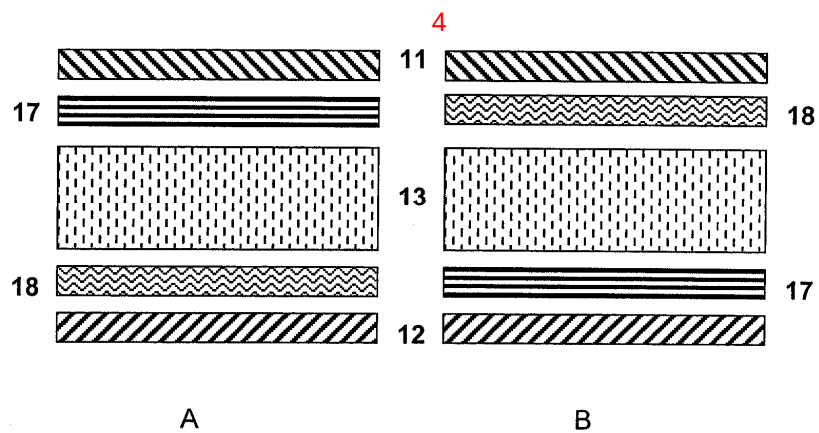


3a



3b

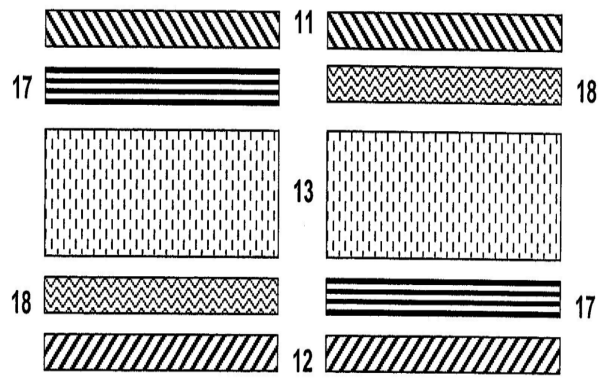




专利名称(译)	一种补偿器，包括正双折射和双折射延迟膜		
公开(公告)号	KR1020030089499A	公开(公告)日	2003-11-21
申请号	KR1020030031158	申请日	2003-05-16
[标]申请(专利权)人(译)	乐金化学股份有限公司		
申请(专利权)人(译)	默克比肩10吨geem BEHA LG化学有限公司		
当前申请(专利权)人(译)	默克比肩10吨geem BEHA LG化学有限公司		
[标]发明人	SKJONNEMAND KARL 스크조네만트칼 PERRETT TARA 페레트타라 PARRI OWAIN 패리오웨인 YU JEONGSU 유정수 BELYAEV SERGEY 벨리아에브세르지 JEON BYOUNG 전병건		
发明人	스크조네만트칼 페레트타라 패리오웨인 유정수 벨리아에브세르지 전병건		
IPC分类号	G02F1/1337 G02F1/139 G02B5/30 G02F1/13363 G02F1/13		
CPC分类号	G02F1/13363 G02F2413/02 G02F1/133753 G02F2413/15 G02F1/1393 Y10T428/10 Y10T428/1036 Y10T428/1041 Y10T428/1059		
代理人(译)	张居正，KU SEONG		
优先权	2002010984 2002-05-17 EP		
其他公开文献	KR101012892B1		
外部链接	Espacenet		

摘要(译)

本发明涉及包括正双折射延迟膜和负双折射延迟膜的补偿器，所述补偿器在显示器和光学元件中的用途，以及包括这种补偿器的显示器。 4



A

B