

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
G02F 1/133

(11)  
(43)

2001 - 0108844  
2001 12 08

(21) 10 - 2000 - 0029786  
(22) 2000 05 31

(71) 136 - 1

(72) 465 602 1006  
49 - 1 102 1206  
1092 1142 1106  
가 479가 119 502

(74)  
:

(54)

, ; , ; , ;  
; ; ; ;  
2 1 ; 2 ; 1  
0 ° 10 ° .

2a

1 .  
 2a , , .  
 2b , , .  
 3a , , .  
 3b , , .  
 4a 4d .  
 5a 5d .  
 6a 6b , , .  
 7a 7b , , .

( )

1 : 3 :

4 : 5 :

6,14 : 10 :

12 :

,  
 .  
 IPS

98 - 9243

Id)가 , (fringe fie

가 1 .

1 , (1) (10) (d: ) . ,  
 (1) (10) (d) (1) (10) (1)  
 5) .

(1) , , 가 .  
 (1) (3) (3) ITO(indium tin oxide)  
 4) (3) (4) (5) (3) (3) (1) (4)  
 (3) (5) (l) (3) (3) (4)  
 (d) (1) (6) 가 ,  
 (6) , (6) 가 ,  
 (1) (10) (12)가 (12)  
 , 가 , (14) (14)  
 (6) 180° .  
 (3) (5) 가 , (3) (5) (d)  
 (3) , 가 , (5) (5) (11) (13) ,  
 , TN IPS , TN  
 , TN , IPS , 가 , 10° 2°  
 , 가 .  
 , ; ;  
 ; 2 , 1 2 1 0° 10° .

1 ; 1 2 0° 10° 2 ;

( )

2a , 2b , 3a , 3b , 4a , 4d , 5a , 5d , 6a , 6b , 7a , 7b

가

( ) ( )

2a ( ) , 2b ( ) , x 가 ( p) 0°, 2°, 4°, 6°, 10°, 20° 가 (voltage) , y (transmittance)

2a , ( p) 0°, 2°, 4°, 6°, 10° , 4V 가 0.3% , ( p) 20° 0.27%

2b , ( p) 0°, 2°, 4°, 6°, 10° , 4V 가 , 0.27% ( p) 20° ( 0.12%)

, 0° 10° 가

( ) ( )

3a, 3b  
 (p) 0°, 2°, 4°, 6°, 10°, 20° 가 x (time)  
 y (transmittance)

3a, (p) 0°, 2°, 4°, 6°, 10°, 20°  
 90% (rising time) 23.6ms, 23.6ms, 23.7ms, 23.8ms, 24.1ms, 25.4ms 90%  
 (decay time) 60.3ms, 60.3ms, 60.4ms, 59.5ms, 58.1ms, 51.4ms  
 (p) 0°, 2°, 4°, 6°, 10° (settling time) 44%  
 (p) 20° 42%  
 (p) 0°, 2°, 4°, 6°, 10° (p) 20°

(p) 0°, 2°, 4°, 6°, 10°, 20° 3b  
 90% (rising time) 43.9ms, 44.3ms, 46.2ms, 45.7ms, 45.1ms, 42.9ms  
 (decay time) 56.1ms, 55.5ms, 55.6ms, 54.4ms, 52.4ms  
 s, 45.7ms (p) 0°, 2°, 4°, 6°, 10° (settling time)  
 35% (p) 20° 30%  
 20° (p) 0°, 2°, 4°, 6°, 10° (p)

( ) ( )

4a 4d 4a 0°, 4b  
 6°, 4c 10°, 4d 20° 5a 5d  
 5c 10°, 5d 20° 5a 5b 6°

4a 4d 10° 가  
 20° 1, 45°

5a 5d 가 10°  
 20° 가

10 가

( ) ( )

6a 6b 7a 7b  
 (transmittance) x (polar angle) y

6a 6b , 20° , 10 가 , .  
 , 7a 7b , 20° , 10 가 , .  
 , 10 , 가 .  
 , 0° 10° 가 , .  
 0° 10° , 0° 6° . , .  
 , 0° 10° .

(57)

1.

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1 ;

2 ,

1 2 0° 10° .

2.

1 , .

3.

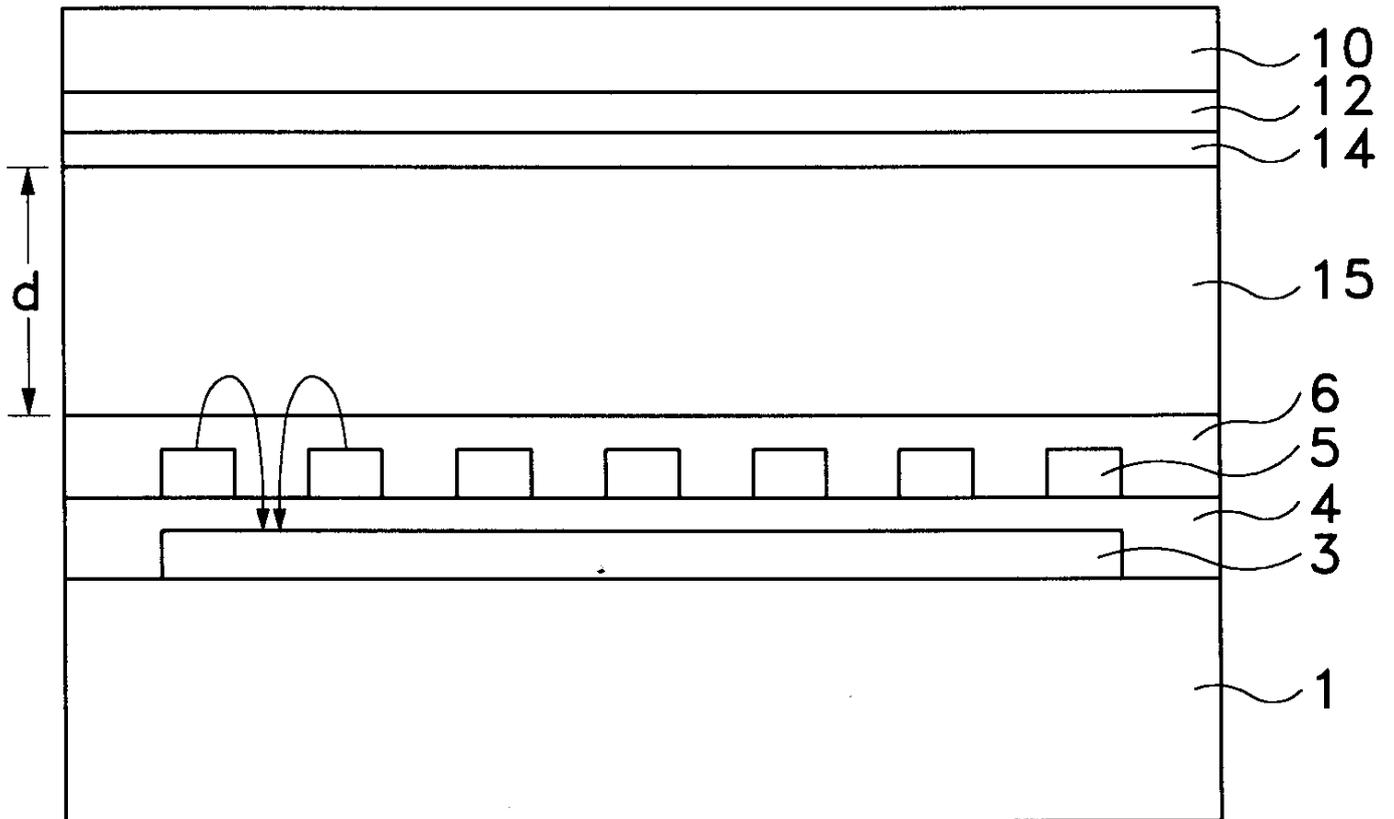
1 , 1 2 0° 6°  
.  
4.

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, ;  
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1 ;  
2 ,  
,

1 2 0° 10°  
.  
5.

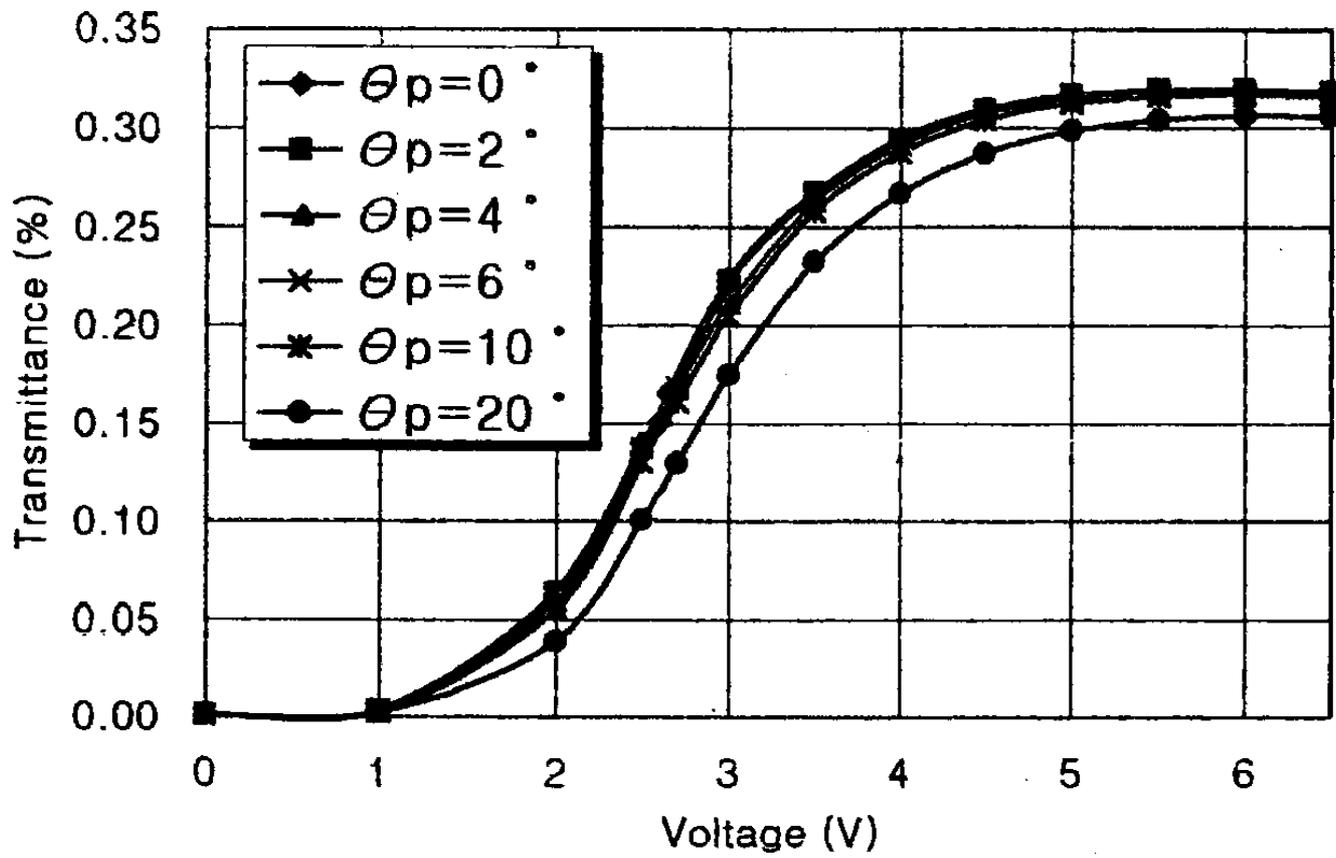
4 , 1 2 0° 6°  
.

1



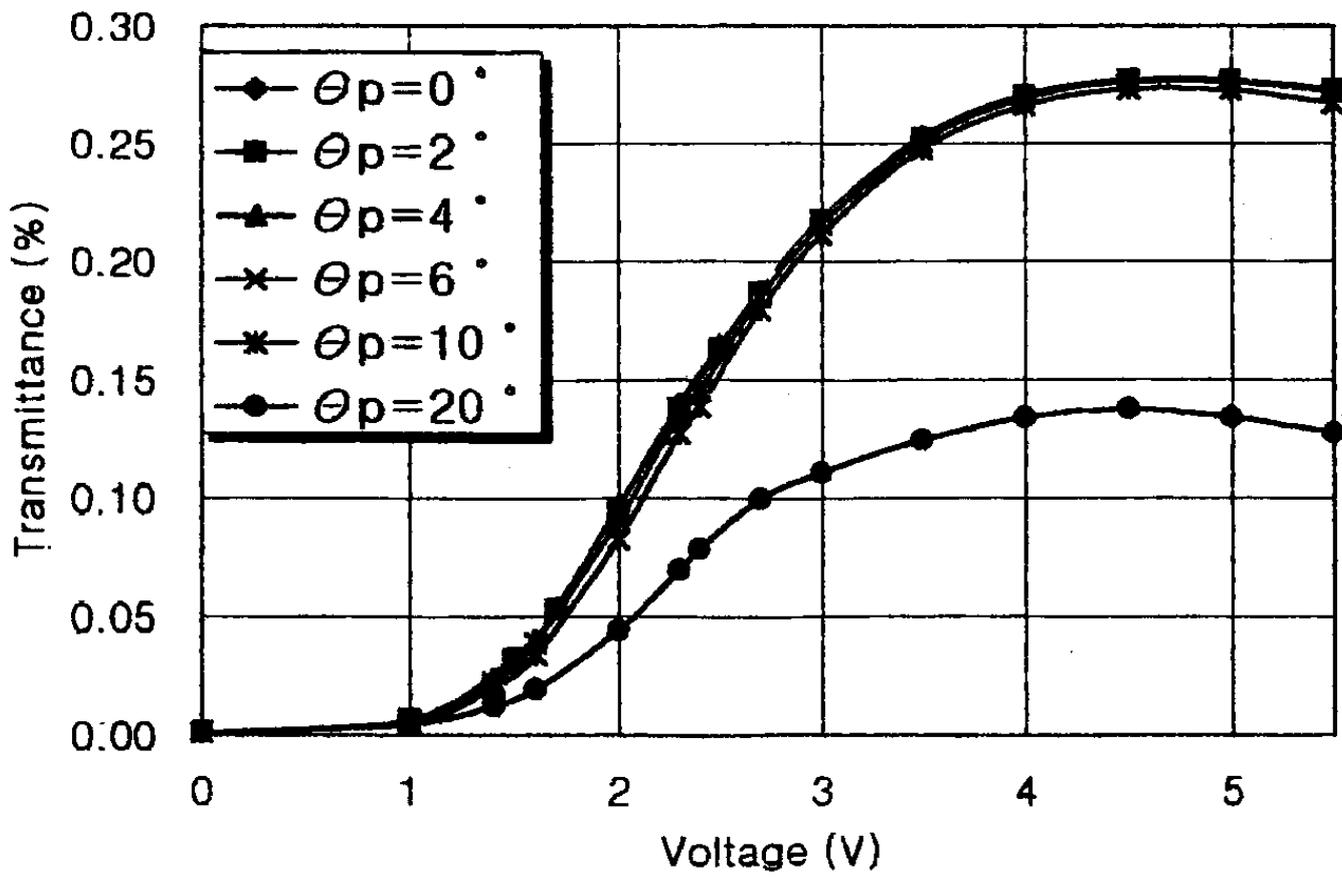
2a

## 음의 액정



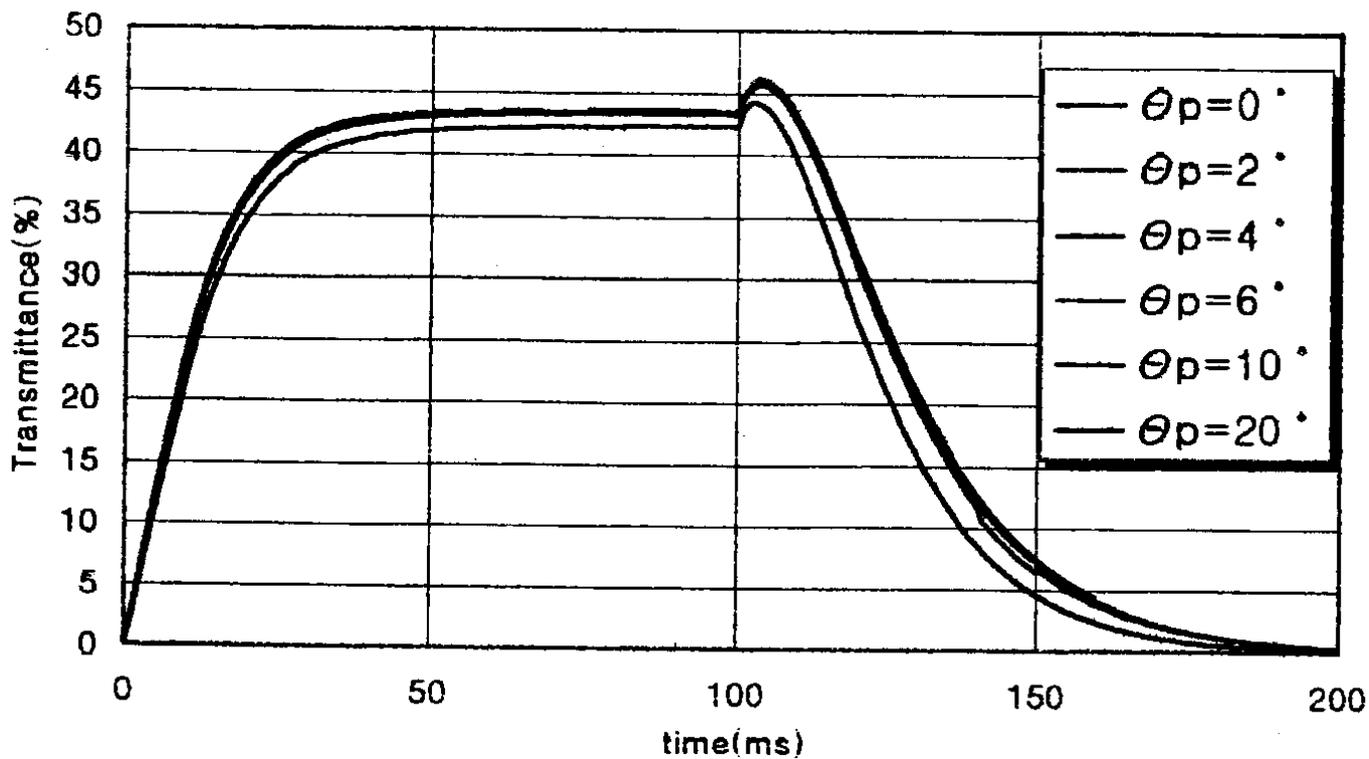
2b

## 양의 액정



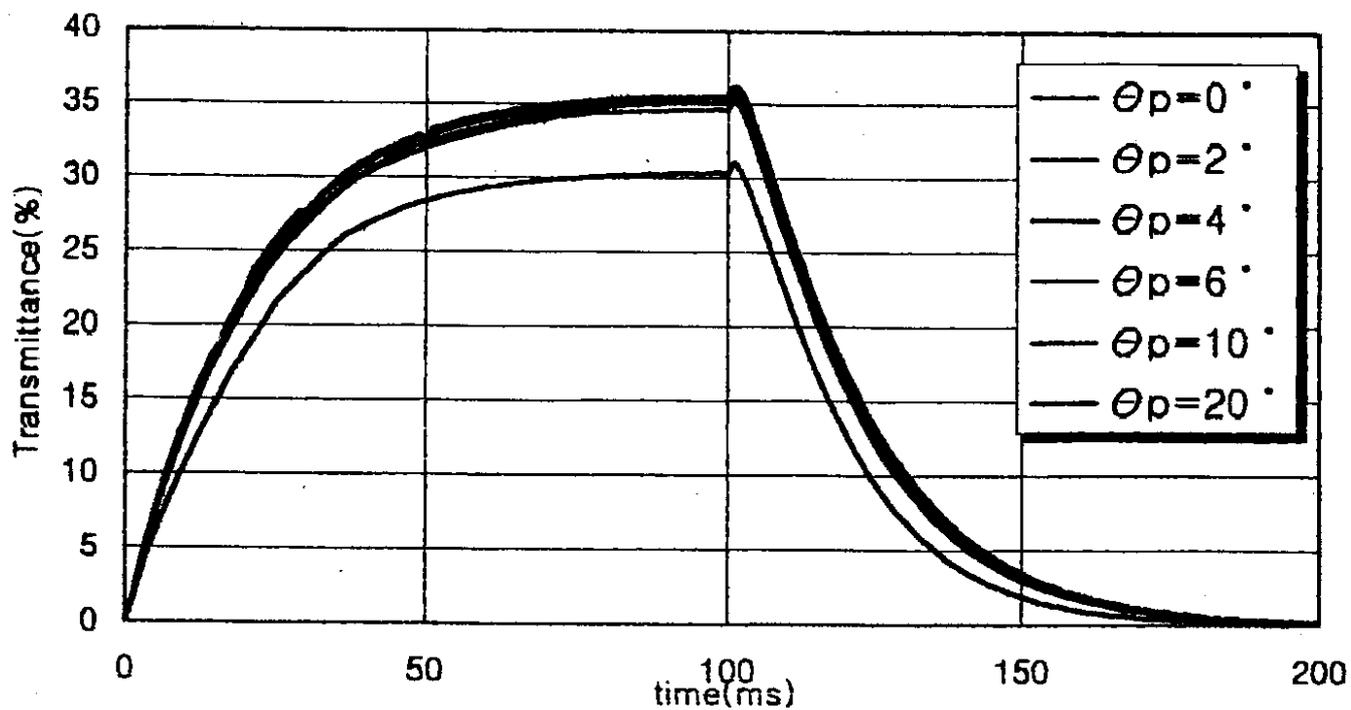
3a

음의 액정

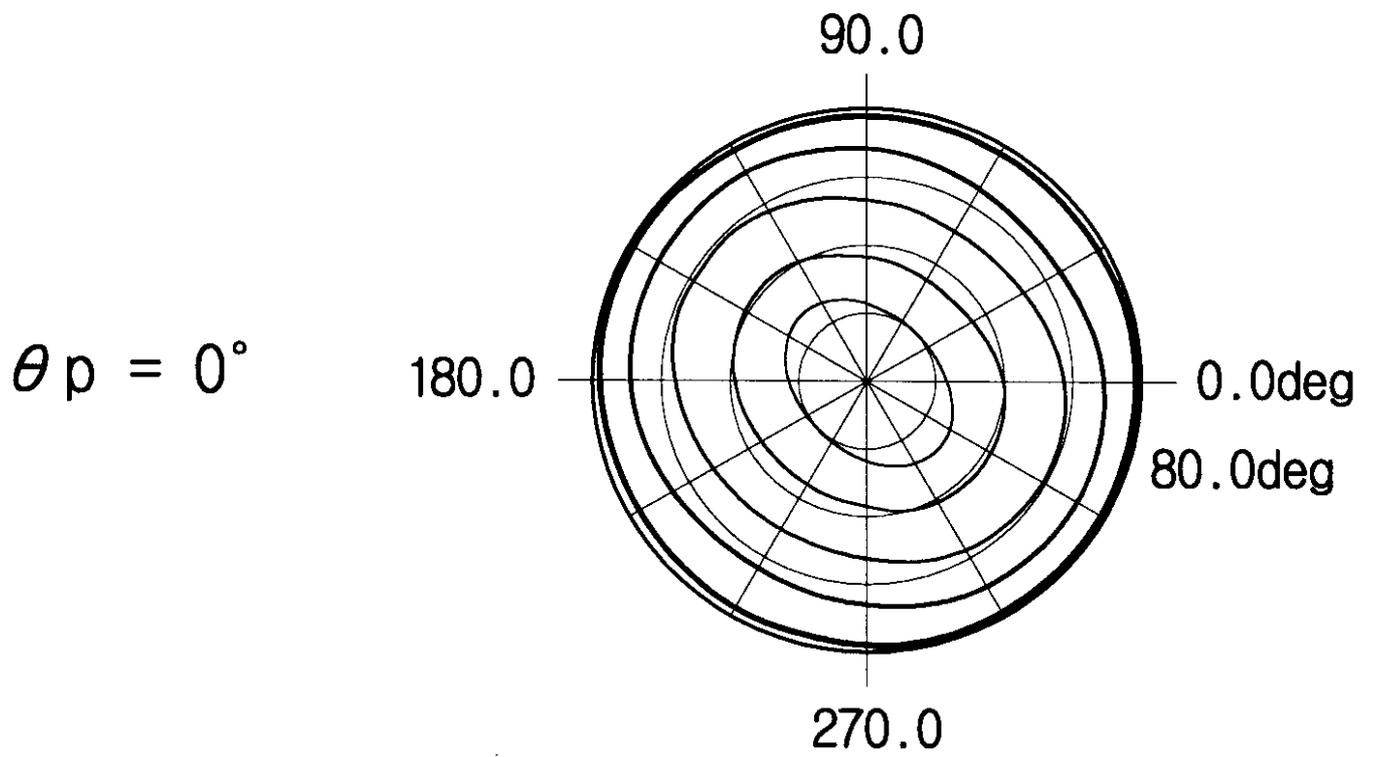


3b

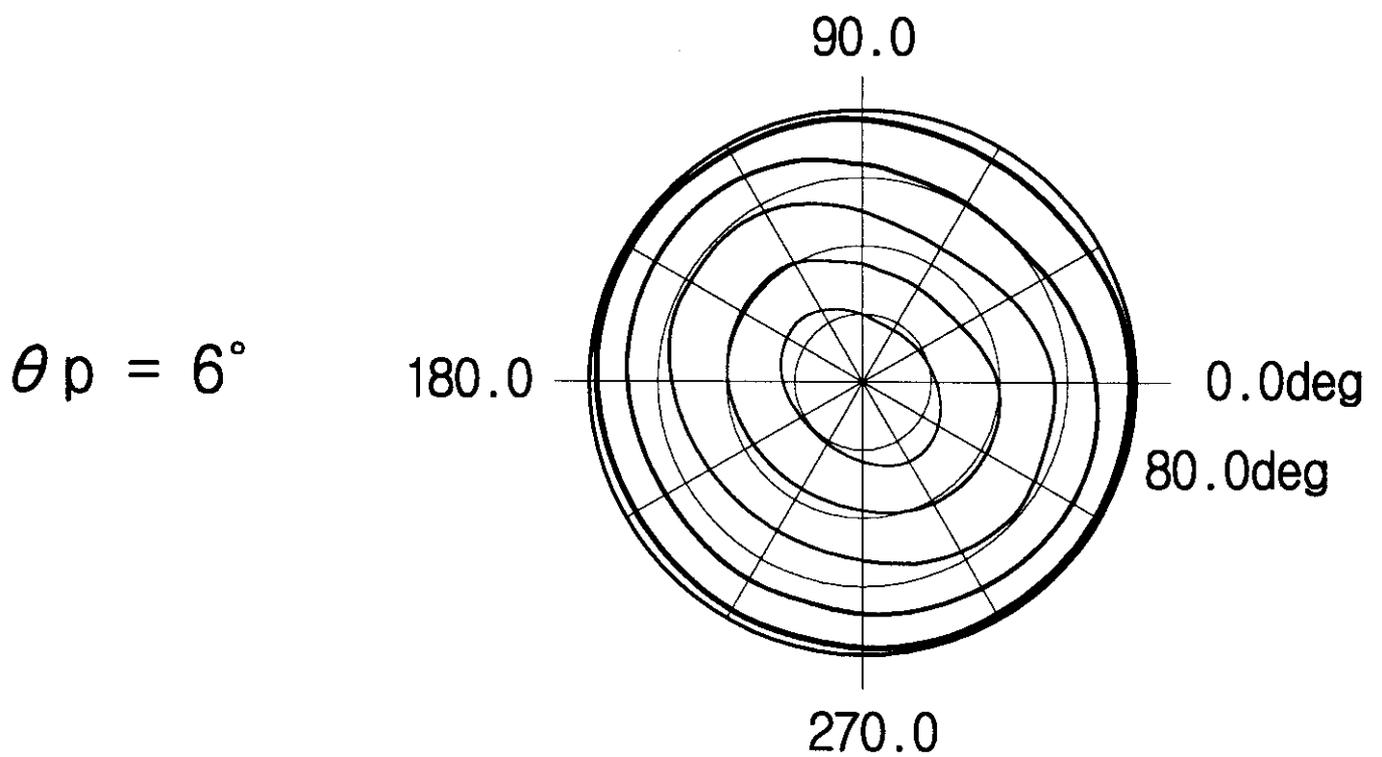
양의 액정



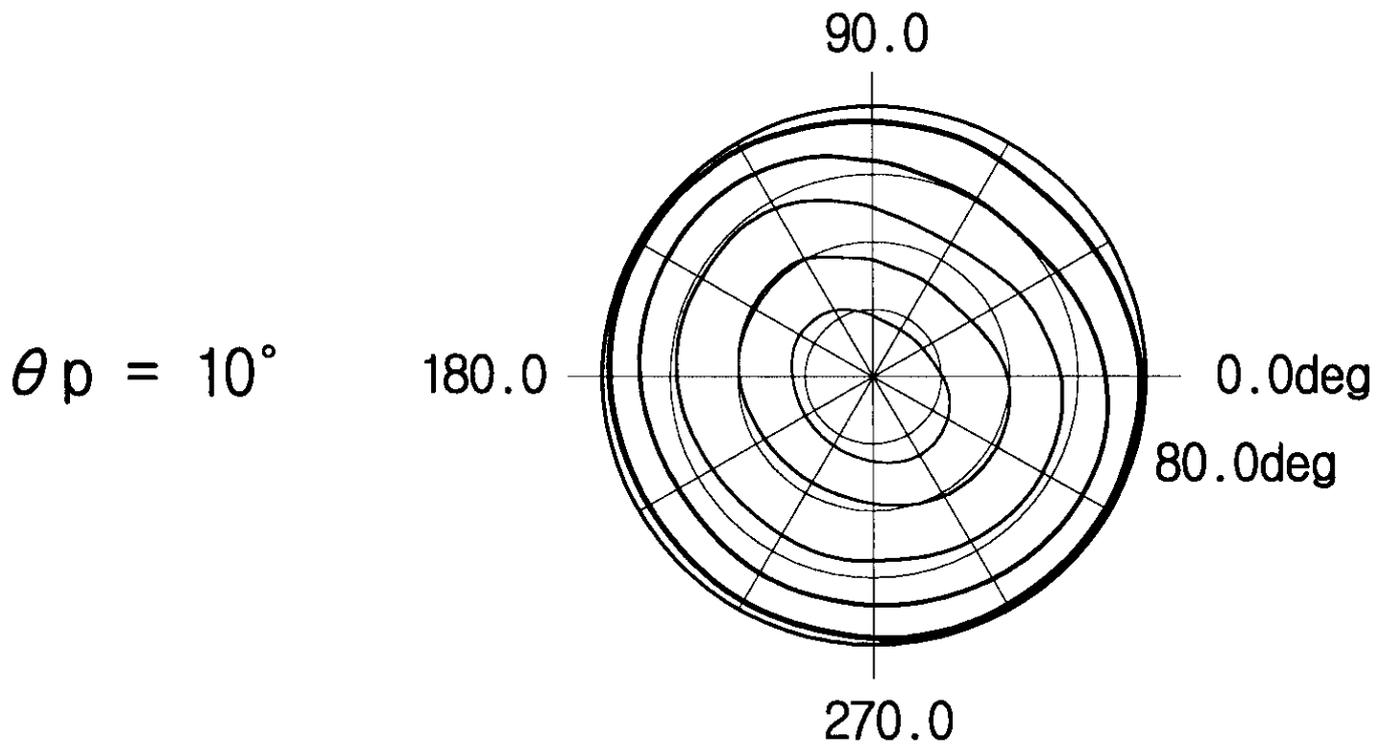
4a



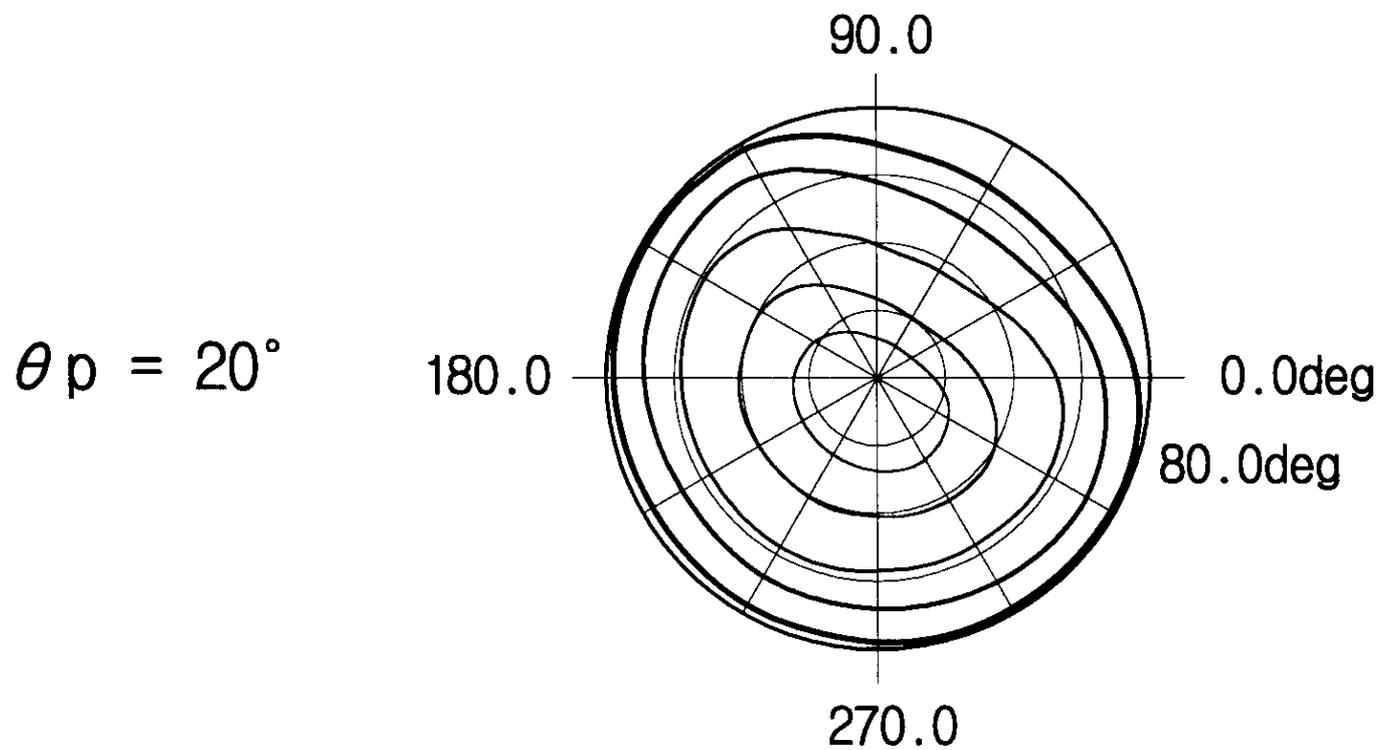
4b



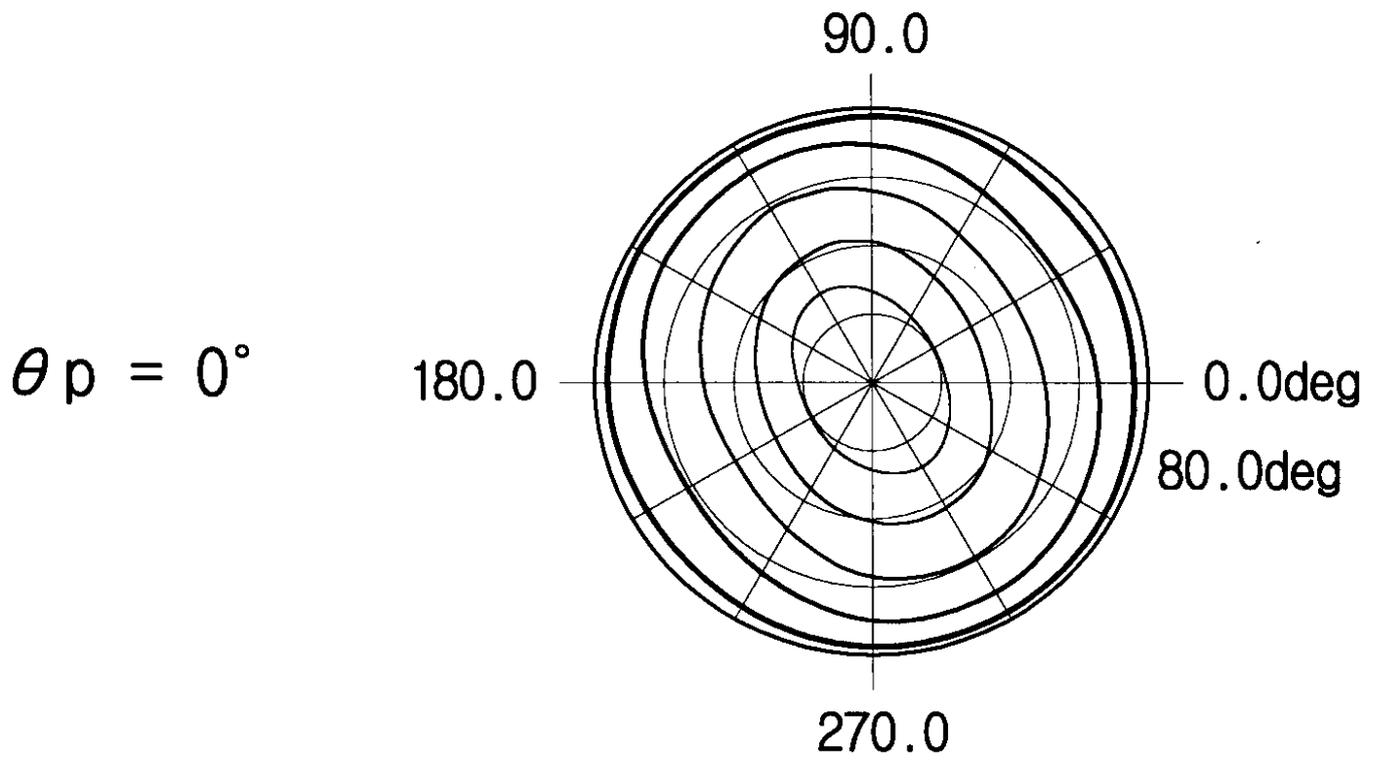
4c



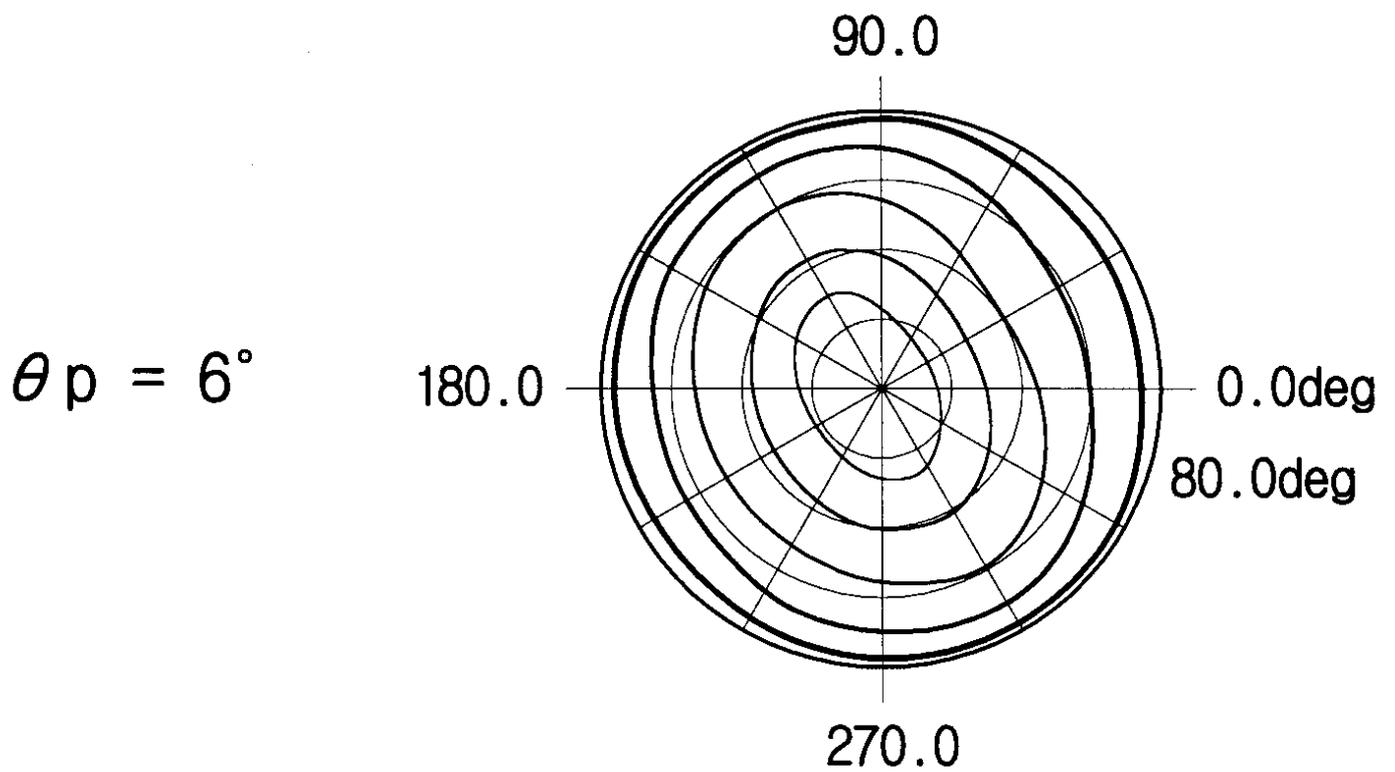
4d



5a

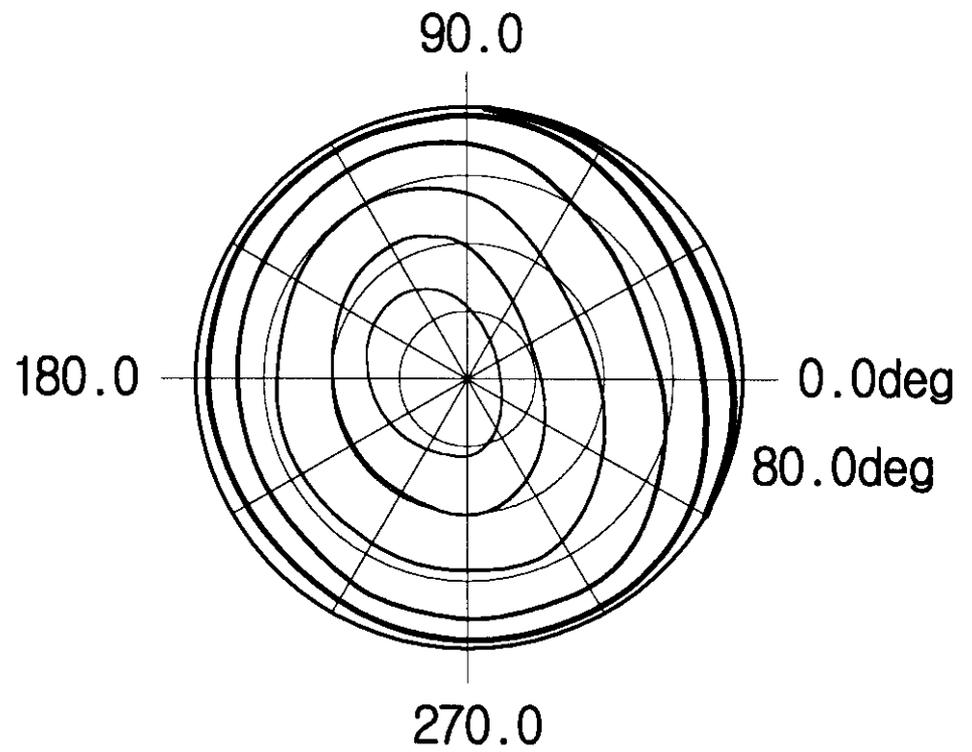


5b



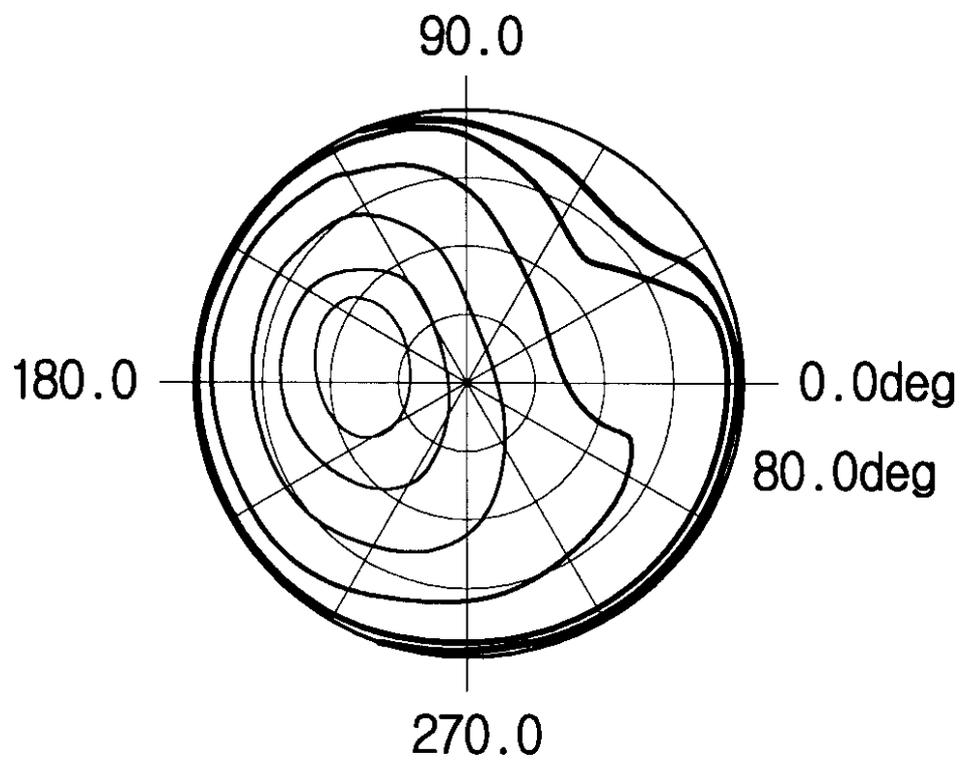
5c

$$\theta_p = 10^\circ$$

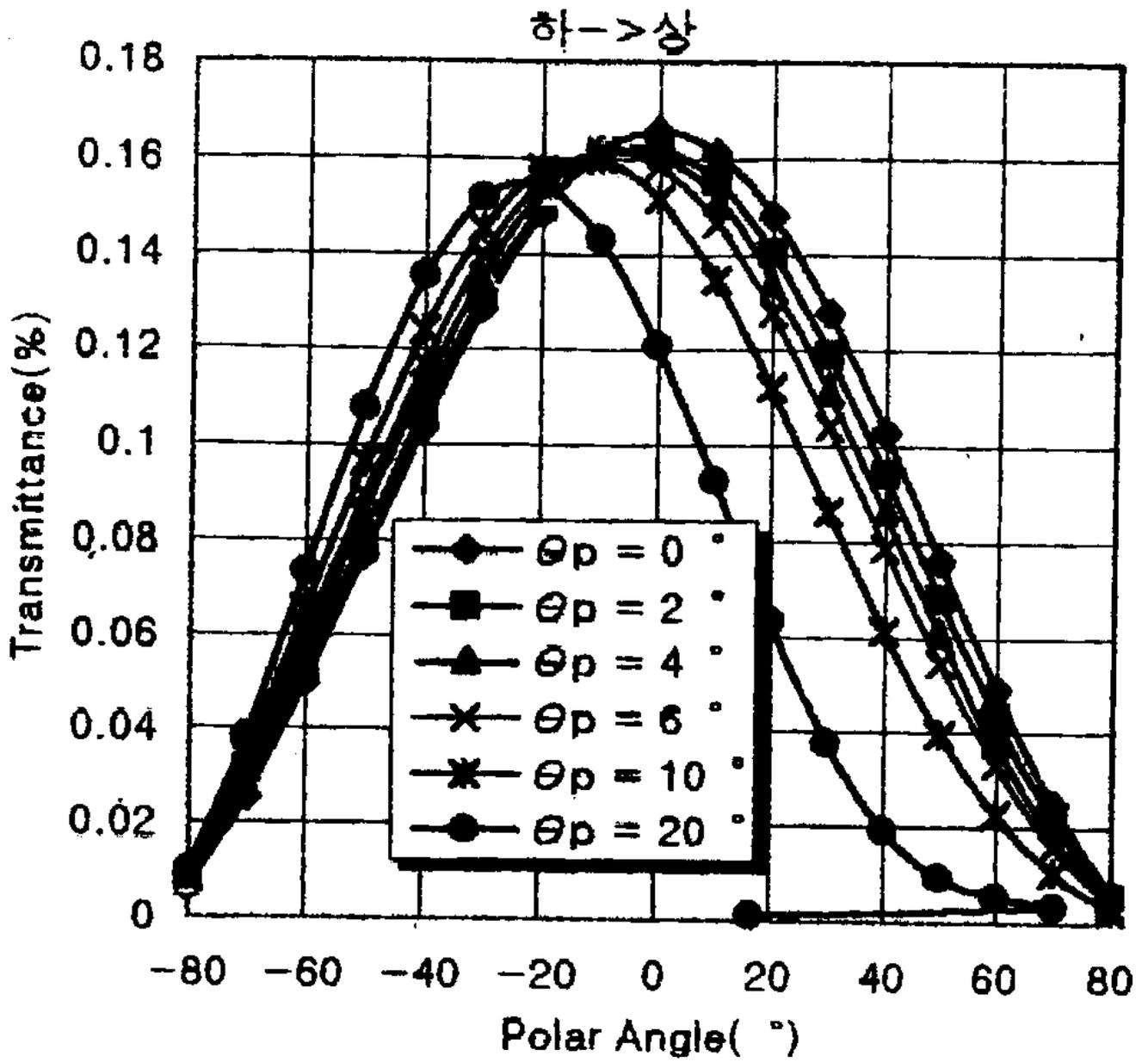


5d

$$\theta_p = 20^\circ$$

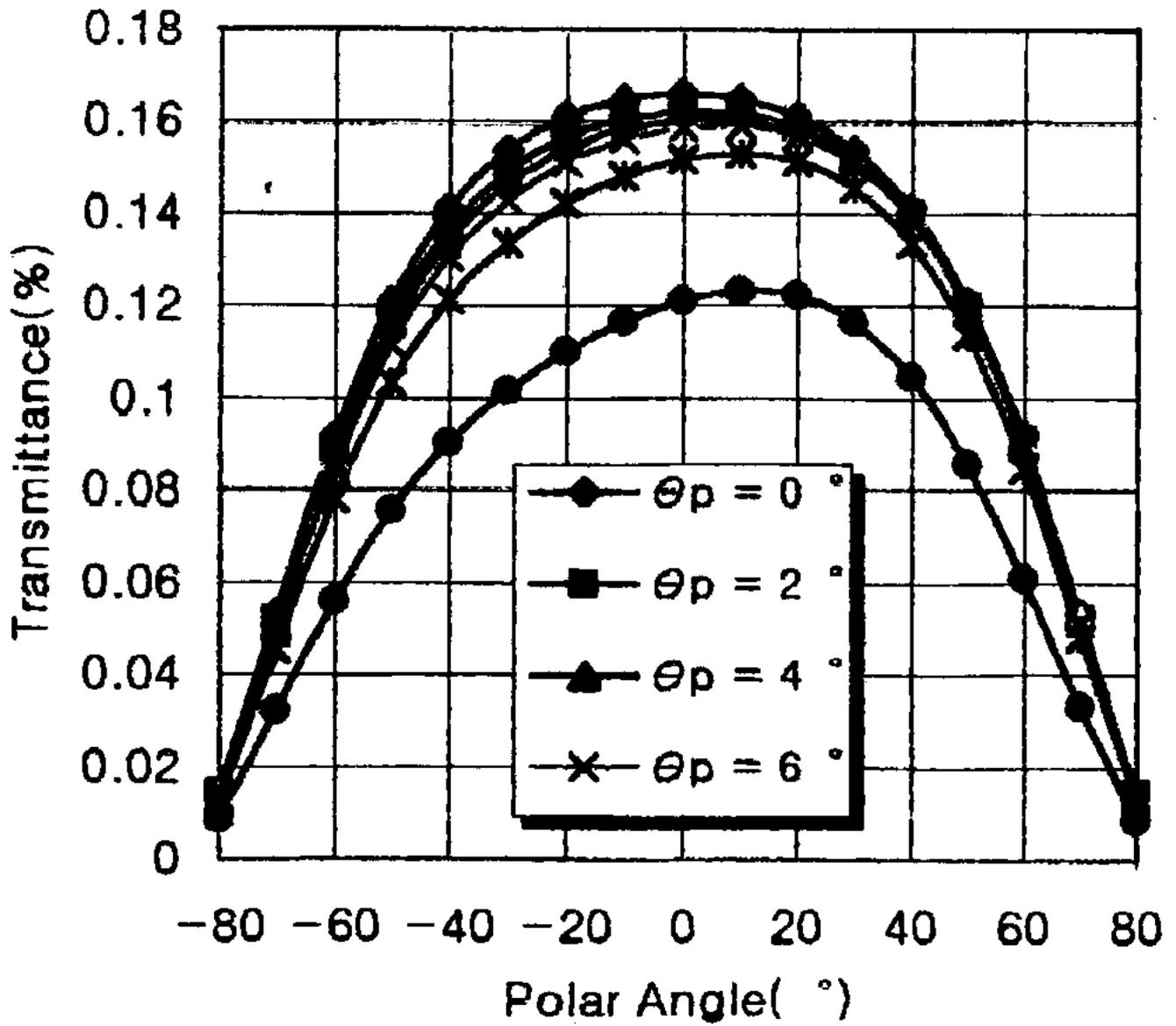


6a



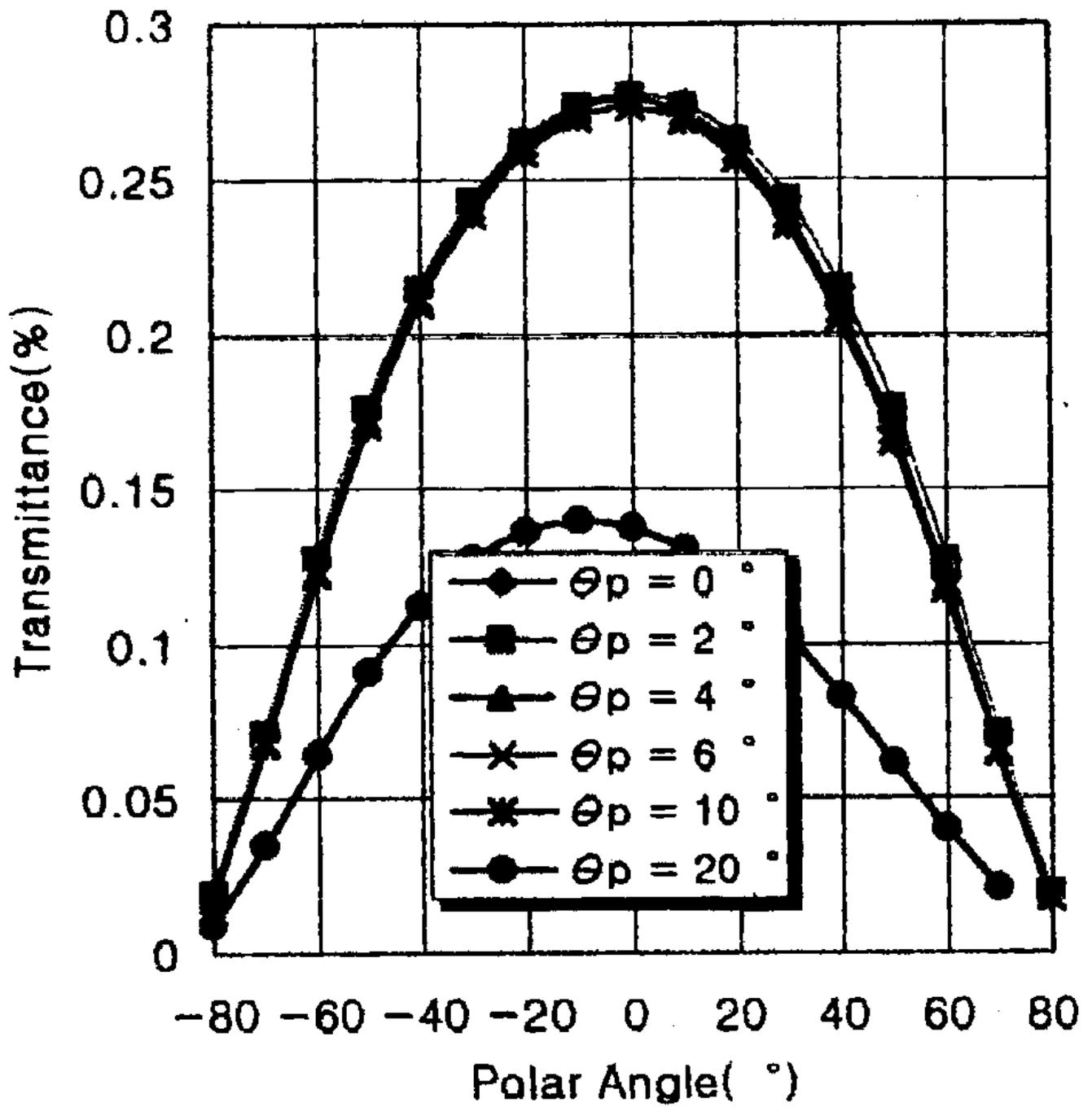
6b

좌 -&gt; 우



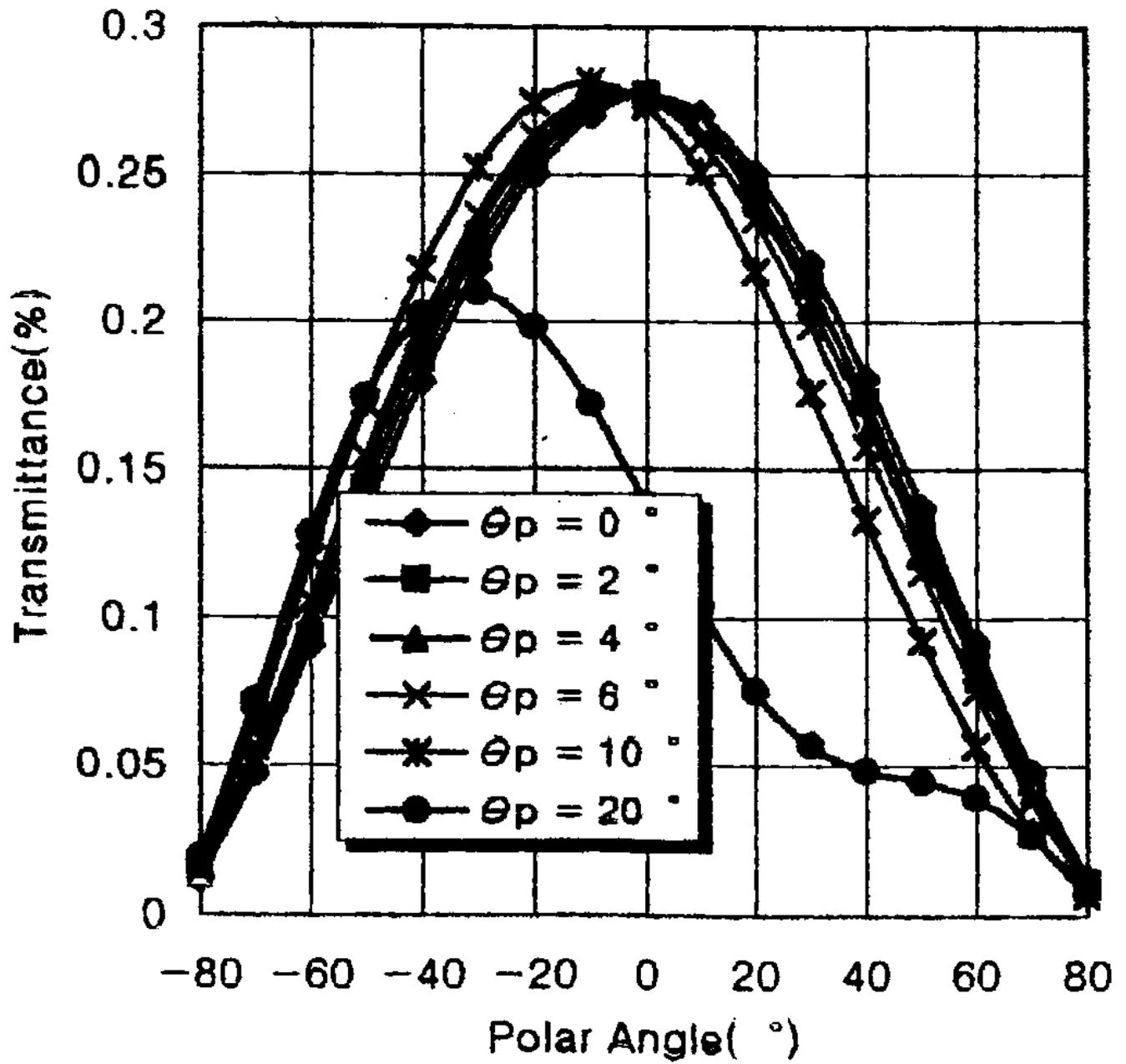
7a

하 - &gt; 상



7b

좌 - &gt; 우



专利名称(译)	边缘场驱动液晶显示器		
公开(公告)号	<a href="#">KR1020010108844A</a>	公开(公告)日	2001-12-08
申请号	KR1020000029786	申请日	2000-05-31
[标]申请(专利权)人(译)	HYDIS TECH HYDIS技术有限公司		
申请(专利权)人(译)	하이디스테크놀로지주식회사		
当前申请(专利权)人(译)	하이디스테크놀로지주식회사		
[标]发明人	KIM HYANGYUL 김향울 LEE SEUNGHEE 이승희 HONG SEUNGHO 홍승호 LIM KYUHWAN 임규환		
发明人	김향울 이승희 홍승호 임규환		
IPC分类号	G02F1/133		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

本发明公开了一种具有电光特性和优化的屏幕质量的边缘场切换液晶显示器。所公开的发明形成在形成于液晶层内侧的透明对电极的内侧：下板包括：下板上部和下部基板：多个液晶分子放置规定距离并且面对允许在上部和下部基板之间。并且，形成边缘场的第一和第二水平取向层具有在0°至10°内的预倾角。

