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(73) 10504

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(74)

:

(54)

(LCD) , 가 가 .
1 1 1
, 1 2 2 , 2 1 2 1
, 1 2 2 , 1 2 2 1
2 , . 2 , 1 2
, . 2 , 2

1

1
2 (8) LCD
3 LCD
4

5 1 ITO 2
6
7 LCD
8 LCD
9 1 ITO 1 2
1 : LCD 2 :
3 : 4, 6 : ITO
5 : 7 :
8, 81, 82 : 10 :
11 : 2 13 :
15, 16 : 18 :
23 :

(明暗比) , 가 가
(LCD) (backlight) LCD , PDA(Personal Digital Assistants)
(LCD) 2 (停電力消費型)
LCD (Power load)가 LCD LCD LCD LCD (Guest)
가 2 (吸光度) , 가 (Host) , 2
, 2 가 (Turn off) 2
, 가 가 , 2
, 가 가 , 2
LCD 4 LCD
1 LCD 2
가 , 2
(White-Taylor Mode) 2 200 ° LCD
2 2 LCD LCD 가 ,
1 2 LCD
2 LCD 3 LCD 2
2 (separator)
() ()
2 () 가 ,

Figure 1 illustrates the schematic diagram of the proposed liquid crystal (LC) cell structure. The diagram shows a cross-section of the cell with various layers and components labeled. The top layer is labeled "ITO" (Indium Tin Oxide). Below it is a layer labeled "LCD" (Liquid Crystal Display). The bottom layer is labeled "ITO" (Indium Tin Oxide). The central region is labeled "LC" (Liquid Crystal). The diagram also shows the thickness of the layers, with labels such as "2 μm", "10 μm", "5 μm", and "8 μm". The diagram is divided into two main sections, (A) and (B), which show different configurations of the cell. Section (A) shows a cell with a "gap" between the ITO layers, while section (B) shows a cell with a "rubbing" layer. The diagram also includes labels for the "gap" and "rubbing" regions, as well as the "ITO" and "LCD" layers. The diagram is a schematic representation of the proposed LC cell structure, showing the various layers and components and their relative positions and thicknesses.

2 (11) 가 가 (正) (10) 2 (11) , 1 (A) ,
 (7) (8) (8) ITO(6)
 1.3 (7) (8) (7) (8)
 (7) (8) (12) 1 (8) (8)
 (8) 1 (B) 2 1 (B) (8)
 , ITO (4, 6) 1 (B) ITO (4, 6) 2 (rubbing)
 2 (11) (13) 3 2 (8) 2
 (8) (8) (a) (12) , I
 TO(6) 2 (8B) , (c) (8A) , (b) 2
 (8C) , (d) 3 (8D)
 (8A) 2 (801, 802) (803) (801, 802) 'a" , (803)

$$\begin{matrix} 1 \\ = \sqrt{2} a \end{matrix}$$

1 (8B) (804) (801) , 2 (8C) (807) (802) 1 (8B)
) (806) 2 (8C) (809) 3 (8D) (810) (803) , (811)
 (805) , (812) (808) (811, 812)

$$\begin{matrix} 2 \\ = \sqrt{3} a/2 \end{matrix}$$

1 (B) (8A) 3 (8D) (8A) 1 (8D)
 (8B) 45 ° , (8A) 2 (8C) 45 ° , (8A) 3 (8D)
 87 ° 90 ° 87 ° 90 ° 가
 1 3 LCD
 3 2 (11) 1 (8) Z Y (1
 (2) X (11) (13) (2)
 3) 가 (14) Z 가 (10) 2 (11)
 , 1 ITO(4) ITO(6) X (2)
 2 (11) (13) (15) (13) 1 (8B)(
 2) (16) (8) 1.3 (16) Z (8) (8)
 1.0 ,
 (8D)(2) 3 (8D) (16) 1 (8B)(2) X 3
) , 2 (8C) (8D) 2 Y 2 (8C)(2
 (8) (16) 90 ° , 90 ° (11) Z
 (15) 2 (11) 90 ° (15) 2 (11) 90 °
 (11) (13) 2 (16) 90 ° (11) 90 °
 가 2 (11)
 3(B) (16) 1 (8B), 3 (8D) 2 (8C)
 3(C) (16) 2 (8C), 3 (8D) 1 (8B)
 (16) 2 (8C), 3 (8D) 1 (8B)

가 , (PEL) ITO(4) ITO(6) 가 가 Z
(10) 2 (11)가 (Z) 3
(8B, 8C, 8D) (5), ITO(4), (3) (2)

4a 4b (3) 4a (3) (17) 4a
(3) n₁ 1 (41) n₂ 2 (41) 1 (41)
2 (42) (43)가 n₄ (44) 4b (3) n₃ 44

LCD 1 (正方形) 5a
2 (81, 82) (81) 3 (8D) (82) 3 (8D)
(8A) (2) 3 (8D) (2) 90° 5a
(2), (3), (5) ITO(6) 2 (81, 82)
82) 1(B), 2 3 B-B 2 (81, 82)
5b 5b , 2 (81, 82)
(8) ITO(6) (7) (81) (20) (12)(1(
A)) 2 (8) (G)
(82) (21) G 5 μm 8 μm
5a 2 μm 10 μm, ITO(4) TFT TFT ITO

6 1 2 (81, 82) (8A)(
2) 3 (8D)(2) 87° (81) (20) (8
2) (21) (G) 5 μm 8 μm (G)
7a 1 (A) LCD (1) (19) (18)
7b 4 100 μm (81,
82) 1 L₁ L₁ 100 μm
8(A) (23) LCD (22) (3) ITO(4)
8b 3 1 L₁ L₂ (81,
82) 100 μm L₂ 2
L₁ 9 300 μm 9 ITO(4) 2 ITO(4
1, 42) ITO(41, 42) 1 ITO(41) (81) ITO(42)
(82)

가 가

(57)

1.

1 , 1
1 1 2 2 1 ,
1 2 1 2 2 , 2
1 1 2 2 1 2
1 1 2 2 2 ,
2 2 2 ,

- 2 1 1 2 , , 2
3 45 ° , , 3 1 45 ° 87 ° 90 ° , 2
2.
3.
1 1 , 1 ,
1 1 2 2 , 1 ,
2 2 1 2 ,
1 1 2 2 1 , 2
1 1 2 2 , , 2
1 2 2 1 2 , , 2
3 45 ° , , 3 1 45 ° 87 ° 90 ° , 2
2 , , 3
4.
5. 2 μm 10 μm
6. 5 μm 8 μm
7. 1 5 , 2 1.3
8.
7 , 2
9.
8 , 1 1
10.
9 , 1
11. 가 2 , 2 1 1 2
2 , , 3 45 ° , , 3 1
87 ° 90 ° , 2 45 ° 2 , 3
3
12.
13. 2 μm 10 μm
11 ,
14.

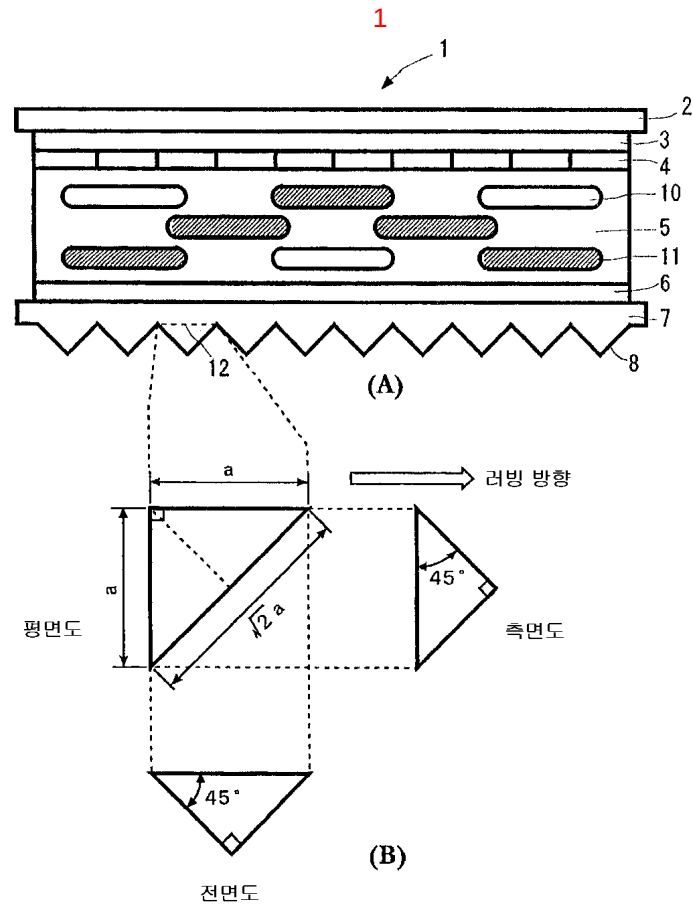
11

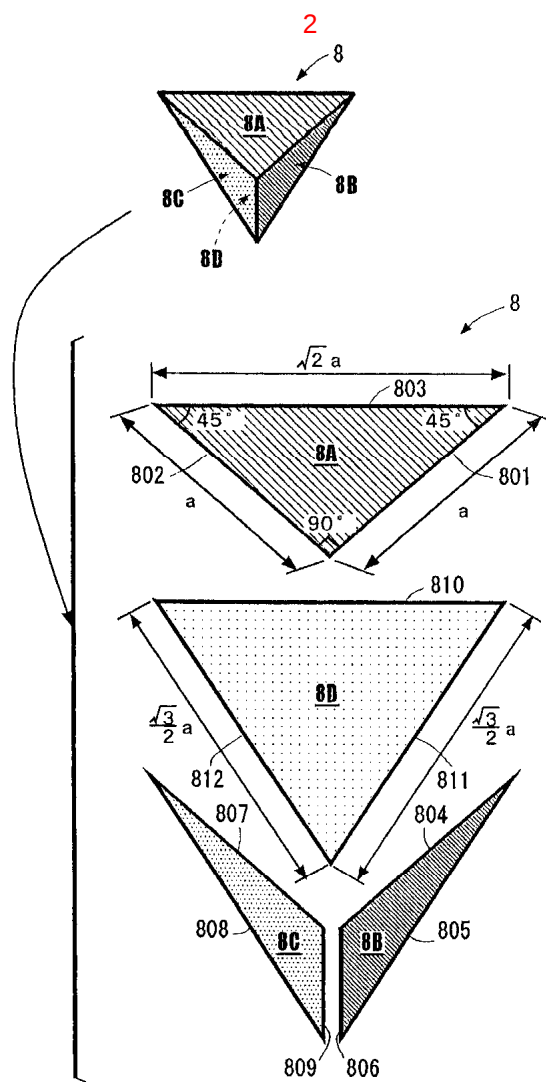
5 μm 8 μm

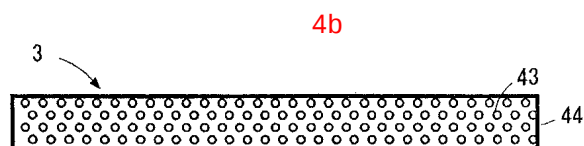
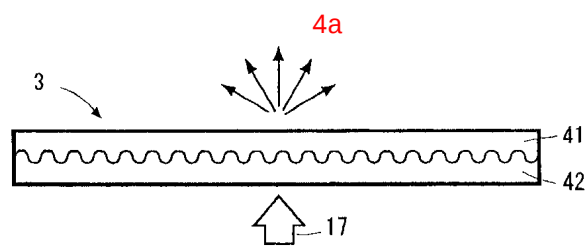
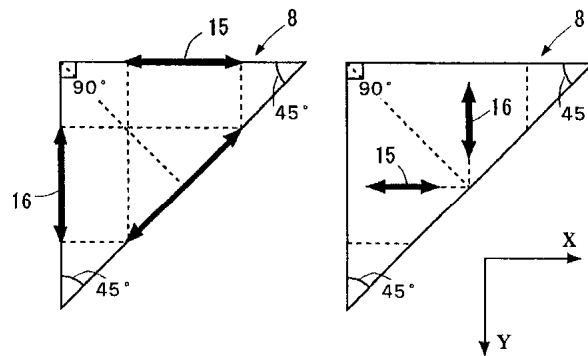
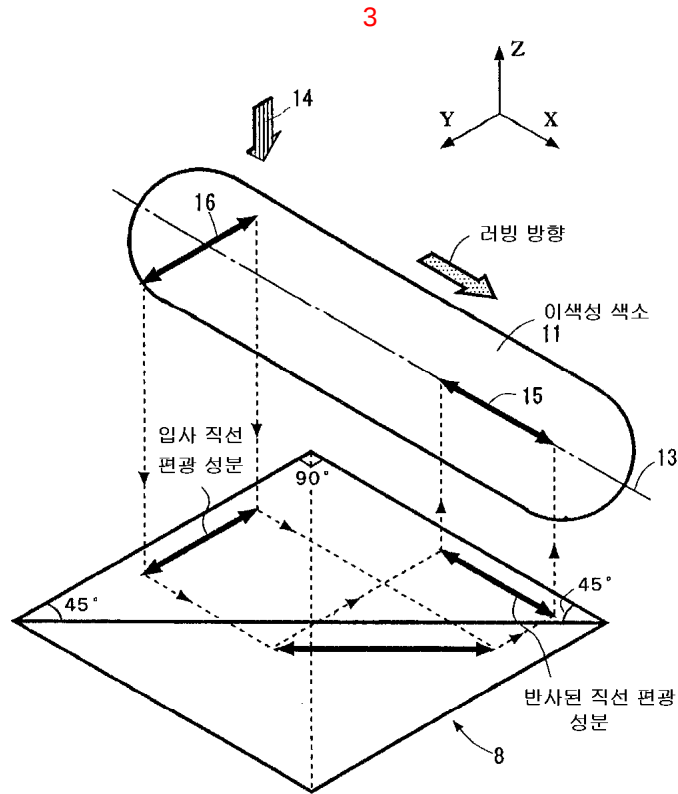
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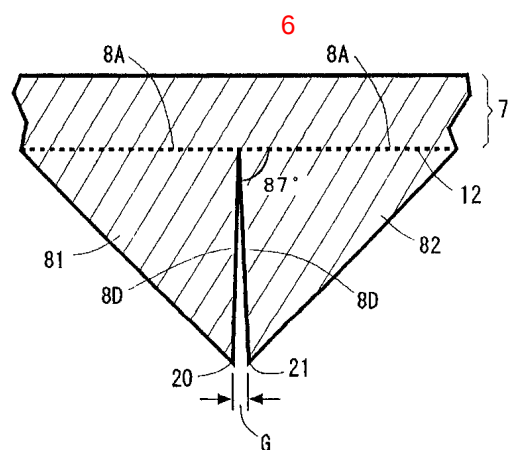
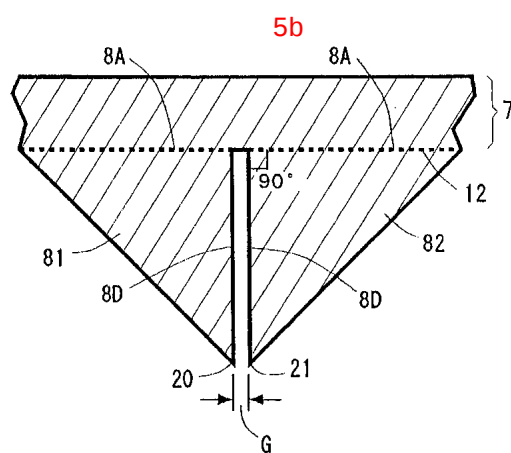
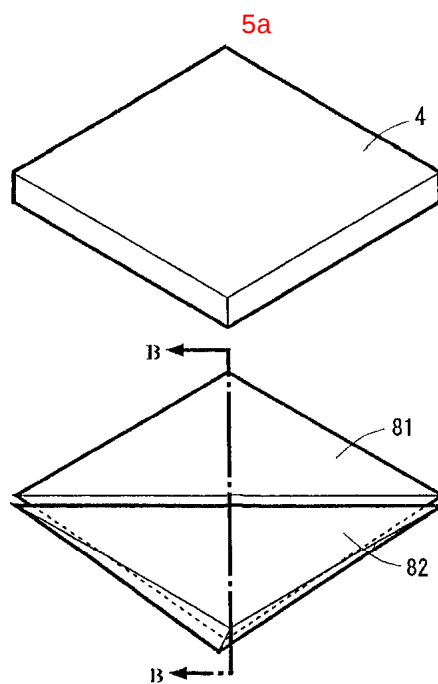
13

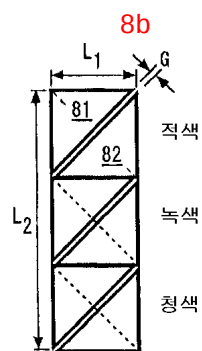
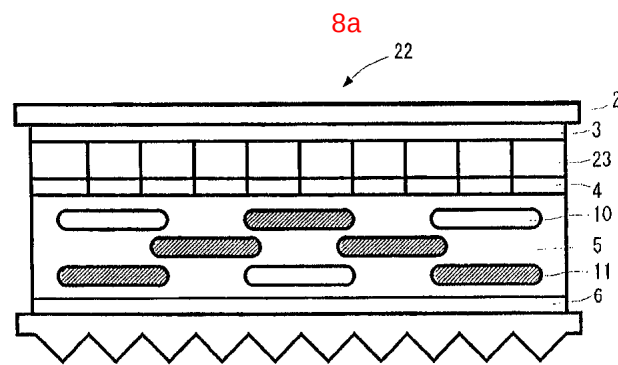
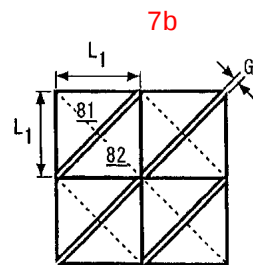
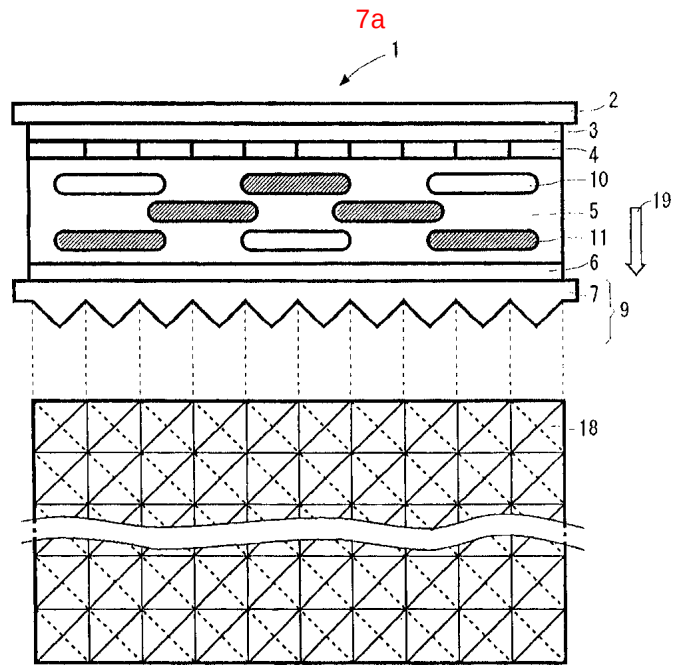
1.3

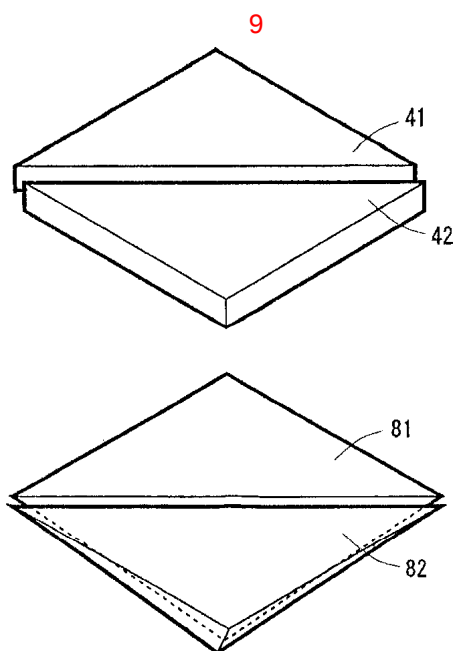












专利名称(译)	反光液晶显示器		
公开(公告)号	KR100427840B1	公开(公告)日	2004-04-30
申请号	KR1020000073598	申请日	2000-12-06
[标]申请(专利权)人(译)	国际商业机器公司		
申请(专利权)人(译)	国际商业机器公司		
当前申请(专利权)人(译)	国际商业机器公司		
[标]发明人	TAIRA YOICHI		
发明人	TAIRA,YOICHI		
IPC分类号	G02F1/139 G02F1/1335 G02F1/137 G02F1/136		
CPC分类号	G02F1/13725 G02F1/133553		
代理人(译)	Park Kyung-joo KIM , SEONG 台技 HEO , JEONG HUN 安诚德		
优先权	1999359670 1999-12-17 JP		
其他公开文献	KR1020010062148A		
外部链接	Espacenet		

摘要(译)

一种反射型液晶显示装置，包括第一透明基板，设置在第一透明基板的一个表面上的第一电极，具有第一表面和第二表面的第二透明基板，以及设置在第二透明基板的第一表面上的第二电极透明基板。第一透明基板和第二透明基板布置成使得第一电极和第二电极彼此面对，并且在第一电极和第二电极之间提供空间。客体 - 主体液晶层设置在该空间中，并且第一电极和第二电极限定多个像素位置。具有三角锥形状的反射器单元设置在第二透明基板的第二表面上的多个像素位置中的每一个处。

