

2002 - 0077380
2002 10 11

WO 2002/46832
2002 06 13

$$\vdots$$

(54)

가 . LCD

가 ,

7

(LCD) . LCD
. LCD

1

2

, LCD

LCD

가

가

(),

(),

가

()

1

G

S

G

(perimeter seal:PS)

S

L

C 1

G

S

PS

가

,

20

가

가

가

), 가

(

가

가

G

, ITO(

VCOM

ITO
)

S

ITO

ITO I

5

ITO I

(

E

ITO I

가

가

. ITO

E

가 ITO I

ITO

가

가

가

가

가

가

/

, VCOM

가

ITO I

C

가

LCD가

LCD

()

가

97%

10 7 ITO () ()

11 10 ITO () ()

, 6, (monochrome projection system), (10) (10) (12), (beam splitter cube: 14), (16), (projection lens:18).

(12) 가, A B 가 / (20) (14) (14) A, B " B" (22) 6 " A", A (12) (24) 6, 6, (14) A B (24), B (18) (18) (14) ()

7 (16') , 가 0.5mm 1.1mm (16)가 (26) 가 (26)

(16') (28) () (28) . ()

(30) (26) (28) 가 (26) (28) (26) (30) (28) (26) (32) (beads:34) 3.7 (annulus:32) (28) (34) 3 4

ITO () (26)

8 SiO₂ (36), (26)

(Indium Tin Oxide:ITO) (38),

2 (40), SiO₂ 1 (36)

ITO 2 (42) 2 (38) (42) ,

2 (36 40) (38 42)

(26)

(38 42)

(38 42) 가

가

(44) (44) ITO (44)

97%

(44) 500 1600 (44) ,

PVD ,

(42)

(46), SiO₂ 가 (42) (44)

(48), SiO₂ (44)

(44) (metal wisker growth)

(44)

() (38,42)

9

(50) (50) 9 (52) (52)

(26)

28) (38 42) PCB ITO

(44) (14)

(12) (44)

(44) 10 (26) 1 (36)

(44) ITO (42)

ITO ITO

1 SiO₂ , 1 SiO₂ 1 ITO

(43) 11 ITO (42) (44)

(43) ITO

가 (54) (26)
 가 (54) (56)
 (56) (26) 가 (54) (44)
 가 (54)
 (44)
 () (26)
 (16')
 4) (26) (28) , ITO () (38,42) () (44,5
 (26) (28) 가 (28) 1000
 (34) (26) (28) ,
 (30) (jetting process)
 (26) (28)
 (32) 가 (30) (34)

가

가

(57)

1.

(a) ;

(b) ;

(c) ;

(d) ;

(e) ;

2.

1 , , .

3.

1 , .

4.

3 , .

5.

3 , .

6.

5 , .

7.

3 , , .

8.

1 , , , , .

9.

3 , .

10.

(a) ;

(b) ;

(c) , .

11.

10 , , .

12.

10 , , .

13.

12 , , , .

14.

13 , .

15.

14 , , .

16.

15 , , .

17.

10 , , , , , .

18.

(a) ;

(b) ;

(c) , .

19.

18 , , .

20.

19 , .

21.

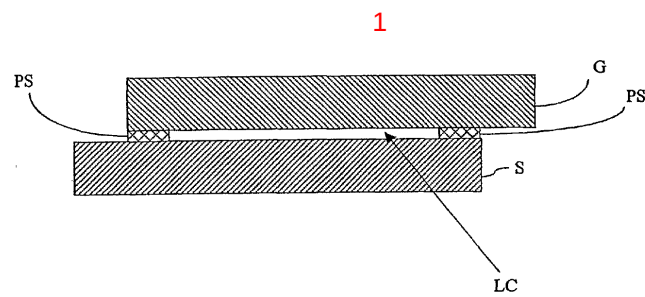
19

22.

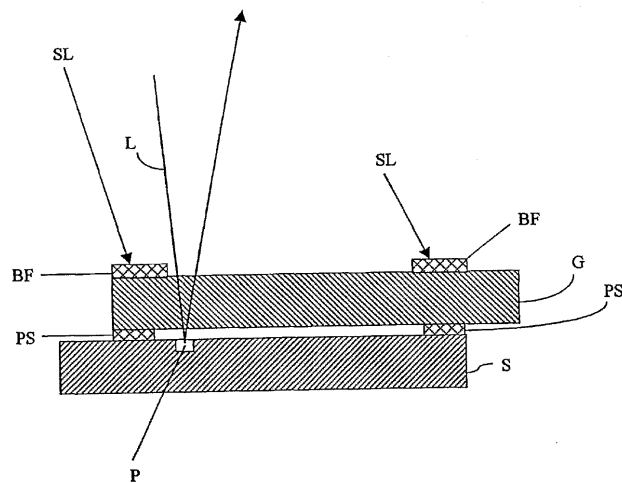
20

23.

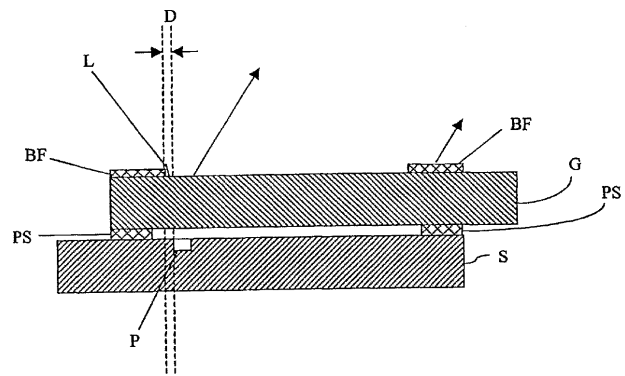
20



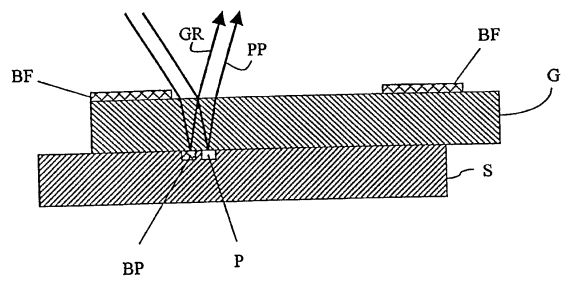
2



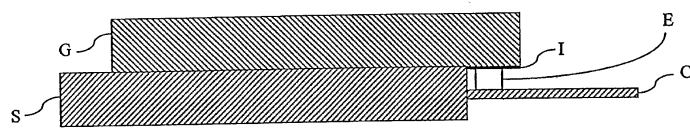
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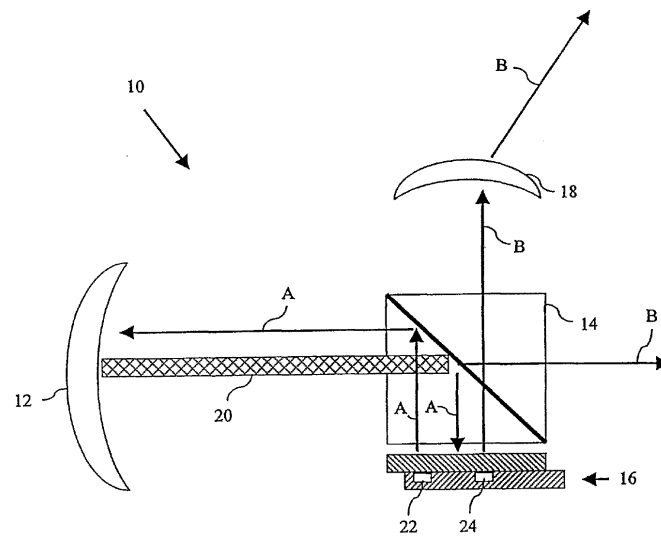
4



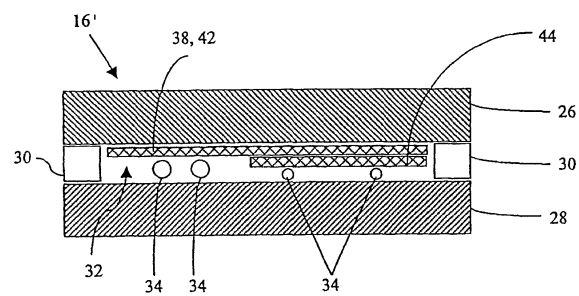
5



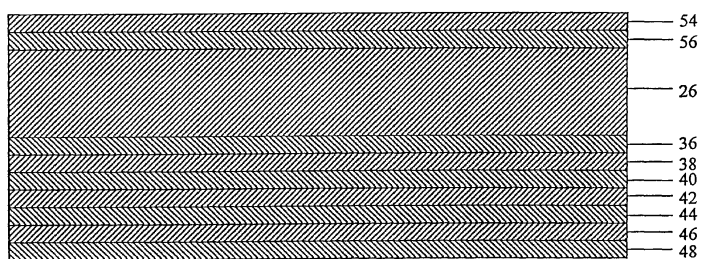
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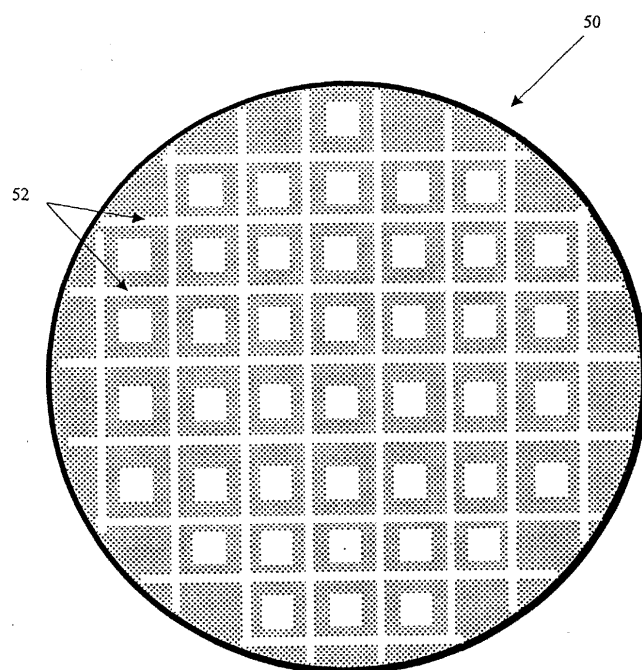
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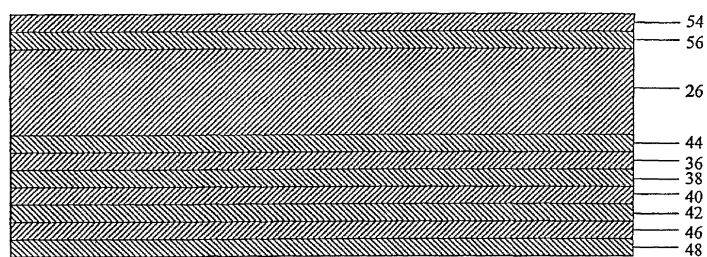
8



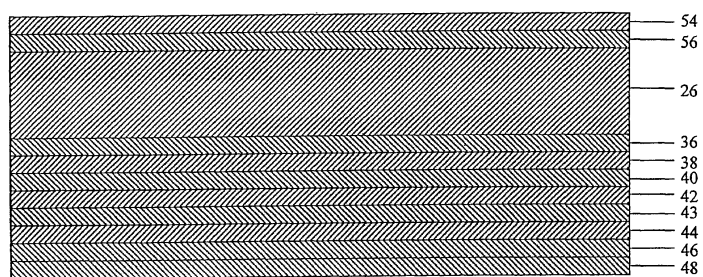
9



10



11



专利名称(译)	一种用于液晶显示装置的孔径框架		
公开(公告)号	KR1020020077380A	公开(公告)日	2002-10-11
申请号	KR1020027008943	申请日	2001-11-09
申请(专利权)人(译)	用你的系统化 , .		
当前申请(专利权)人(译)	用你的系统化 , .		
[标]发明人	DAY KEVIN K SLATER ANDREW R		
发明人	데이,케빈,케이. 슬래터,앤드류,알.		
IPC分类号	G02F1/1333 G02F1/1335		
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外部链接	Espacenet		

摘要(译)

提供一种具有带有改进的黑框的显示屏的液晶显示装置。LCD的微显示器包括设置在硅衬底的上表面上的像素矩阵，玻璃层和设置在硅衬底和玻璃层之间的反射材料层，优选铝。反射材料层具有形成围绕像素矩阵的框架的图案，并且当用户在显示屏幕上观看时涉及产生黑框。反射材料层用于将光反射到光源，从而向用户显示纯黑色图像。在另一实施例中，图案化反射材料层，优选黑铬，设置在玻璃的上表面上，以形成围绕像素矩阵的框架。玻璃顶部的反射材料层可以在玻璃底部的反射材料层处或附加地使用，以产生改进的黑色框架。

7 指数方面 液晶显示装置，孔径框架，玻璃层，反射材料层

