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2004 01 07

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(22) 2002 06 22

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(54)

가 , 1 가 2 , 1 가 , 1

2

1

2 1

3 2 A-A`

4 3 B

5 2

6 5 C

7 3

8 7 D .
 9 4 .
 10 9 .
 11 5 .
 < >
 200 : 210 :
 300 : 310 :
 320, 360, 370, 380 : 330 :
 350 : 400 :
 500 : 600 :
 1000, 1100, 1200, 1300 :

가

가

(direct type) (edge type)

1

1

(110) , (100) (110) ,
 (120)
 (122) 2 (120) 1 (121) , 1
 (123) , 1 (123)
 (121) , (122) , (123)

(125) (124) (125) (124) (124)

(125) (121) (124)

(123) (125) (125)

(122) (122) (121)가

(121) 1 (123)

(122) 2 (123) 1 (123)

(123) (upper) (130) (130)

(110) (110) (125) (100)가

(140)가 (100)가

1 (122) 가

2 (121b) 1 (121a) 1 (121a) 가 2 (121b)

1 (150) (110) 가

(100) 가 (100) 가

(123) (121) (d1)가

(100)

가 2 1 1

1 가 2 1 1

2 2 1

가

2 1 A-A` 4 3 B 3 2

2 3 , 1 (1000)
 (200) , (200) (210), (300) (2
 30), TCP(240) TCP(250) . (220), (2)
 TFT (210) , TFT (211), TFT (211) (213)
 (211) (213) ())
 FT , TFT (211) TFT()가 . T
 (Indium Tin Oxide; , ITO) TFT (211)
 (213) (213) ITO RGB 가
 (210) TCP(240)
 (220) TCP(250) (2
 (230) , (200)
 20, 230) TCP(240, 250)
 , (300) 1 (310) , 1 (310) (330)
 50) 2 , (330) , (320) , (340) , (330)
 (3)
 2 3 8 8 , ,
 , (340) (350) , (320)
 (340) (350)가 .
 (340) , (310) (341)
 . (341) (330) (342)
 , (350) , (350) ,
 (320) , (320) (310)가 .
 , (320) (340) (340) 1 2 (322, 323)
 23) , (340) (320) (320) 1 2 (322, 3
 () , (340) (310) (340)
 (310) (340) 가 . 가
 (310) , 1 (322) (340) 가
 (340)
 , 1 (330) , (320)
 (330) . 1 (330) 2
 4 , (320) (322, 323)
 . (320) (330) (321) , (321)
 1 1 (1) 1 (322) , (321) 2 ,
 1 (322) 2 (323) .

(310) (321) 1 (322) (310)
 (321) 1 (311) (322) 2
 (312) 1 (311) (330) (d1) 2 (312)
 (330) (d2) 2 (312) 1 (311) (330)
 가 가

1) 1 (1) 2 (2) 2 (2) 1 (1) 2 (2) 1 (1)
 0° 2 (312) 2 (2) (330) 1 (1) (322) 1 (1)
 180° 2 (2) 0° 1 (1)

0) (d1) (1000) (312) (330) (d2) 1 (311) (330)
 가 가 3 (600) 가

(310) (320) (310)
 2 3 (400) (310) (330) (330) (350)
 (400) (400) (330) (330) (350) 가
 (400) (400) (210) (500)가 (500)
 (210) / (210) (350)

5 2 6 5 C
 5 6 2 (300) (310)
 (330) (340) (350) (320)

5 8 8
 (320) (321) (321) 1 (1) 1 (322)
 (321) 2 (2) (310) (310) 2 (323)
 (321) (321c) (321) 3 (3) 3 (321c)
 (321a, 321b) 4 (4) 4 (321b) 3 4 (321a)

(310) (321c) 3 4 (321a, 321b) (310) (320) (321c)가
 (310) (321c) (350) ()
 (1000)

7 3 8 7 D

7 8 , 3 (1100)
 (200) , (200) (300)

(300) 1 (310) , 1
 2 (330) , (360) , (310) (330)
 (340) , (350)

7 8 8 , ,
 (360) (330) 1 (361) , 1 (361)
 1 (1) 1 (362) , 1 (362) 1 (361)
 2 (363) , 2 (363) 2 (2) 2
 (364) , 1 (1) 2 (2) , 1
 (1) 0° 180° , 2 (2) 0° 180° .

(310) 1 (361) 2 (363) (310)
 1 (361) 1 (311) , 2 (363)
 2 (312)

, 1 (311) (330) (d1) 2 (312) (330)
 (d3) , 2 (312) (330) (d3)가 2 ()
 312) 가 가 1 (311) 가 (210) ,
 가 (210) 가 (1100) (210)

7 , (340)
 , ()가 , 2 2 (340) (310)
 (350) 가 2 (312) 1 (311) (3
 40)

9 4 , 10 9

9 , 4 (1200)
 (200) , (200) (300)

(300) 1 (310) , 1
 2 (330) , (370) , (310) (330)
 (340) , (350)

9 8 8 , ,
 , (310) (330) (330) ,
 (370) 2 (330) 가

, (370) 1 (1) 1 (371) ,
 (330) 2 (2) , 1 (371) 2
 (372) 2 (372) 3 (3) 3 (373) , 1
 (371) 4 (4) 4 (373) , 1 (

371) 2 (372) (375) (330) .
 9 , 2 (372) 1 (371) (330) 가 1 (1)
 , 1 0° 90° , 2 -90° 0°
 (3) 4 (4) , 1 (1) 2 (2) . , 3
 , 1 (370) 1 (1) 2 (2) .
 , (371) 2 (372) (375) (330)
 , (310) 1 (371) 2 (372) , (310) (310)
 (310) 1 (311) 1 (311) , (d4) 2 (312) 2
 (312) (330) (d5) , 1 (312) (210) 가 2 (31
 1) , 가
 가 4 (1200) (210)
 (310) , (310) 가 , (310) (340)
 가 (370) , (310) (330)
 , (340) (310) (330) 가
 , 10 (355) (370) (370) 가 .
 2 (372) , (355) (370) 1 (371) 3 (355a) ,
 , 2 (372) 4 (355b) , 1 (371) 3 (355a)
 , 4 (355b) .
 (355) , (355) (355c) (355c) .
 (355) , (355c) (1200) (1200) (370)
 , (1200)
 11 5 .
 11 , 5 (1300)
 (200) , (200) (300)
 (300) 1 (310) , 1
 2 (330) , (380) , (310) (330)
 , (340) , (390)
 11 8 8 , ,

(380) 1 (330) , (330)
 가 . 2

(381) 1 (380) (330) 1 (1) 1 (381) , 1
 (381) 2 2 (2) 2 (382) , 1 1
 1 (381) 가 3 (3) 3 (383) . (330)

0° 1 (1) 0° , 90° 3 (3) 0° 180° , 2 (2) 0° 18

(310) 1 (381) , (310) (380)
 , (310)

, (330) (310) (330) 가
 가 , 5 (210) (310) (310)
 가 (1300) (210)

, (310) 가 (310) (340)
 (310) 가 (380) , (310) (330) (330)
 (310) 가 (340)

(390) (380) , (390)
 (380) (380) 1 (381) 1 (381) 3 (391)

, (390) (395) , (395)
 (1300) 가 ,
 (1300)

, 11 (380) 1 (381)
 , 1 (381)

가 , ,

, 가

(57)

- 1. 1 ;
1 2 ;
가
, 1 .
- 2. 가
1 , .
- 3. , ,
2 1 ;
가 , ;
- 4. , ,
3 ;
1 , 1 ;
1 2 , 1 2 .
- 5. , 1
4 .
- 6. , ,
3 1 ;
1 1 , 1 ;
1 , 1 2 ;
2 2 , 2 2 .
- 7. , 1 2
6 .
- 8. 가
1 , .

8 9. , , 1 ;

; 가 , .

9 10. , , 1 , 1 ;

2 , 1 2 ;

2 3 3 ;

1 4 4

10 11. , 1 2 .

11 12. , .

11 13. , 1 2 .

10 14. , .

1 15. ;

1 2 ;

1 가 ; ,

2 ;

15 16. , 가 .

17.

15 , 가

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18.

17 , ,

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가

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19.

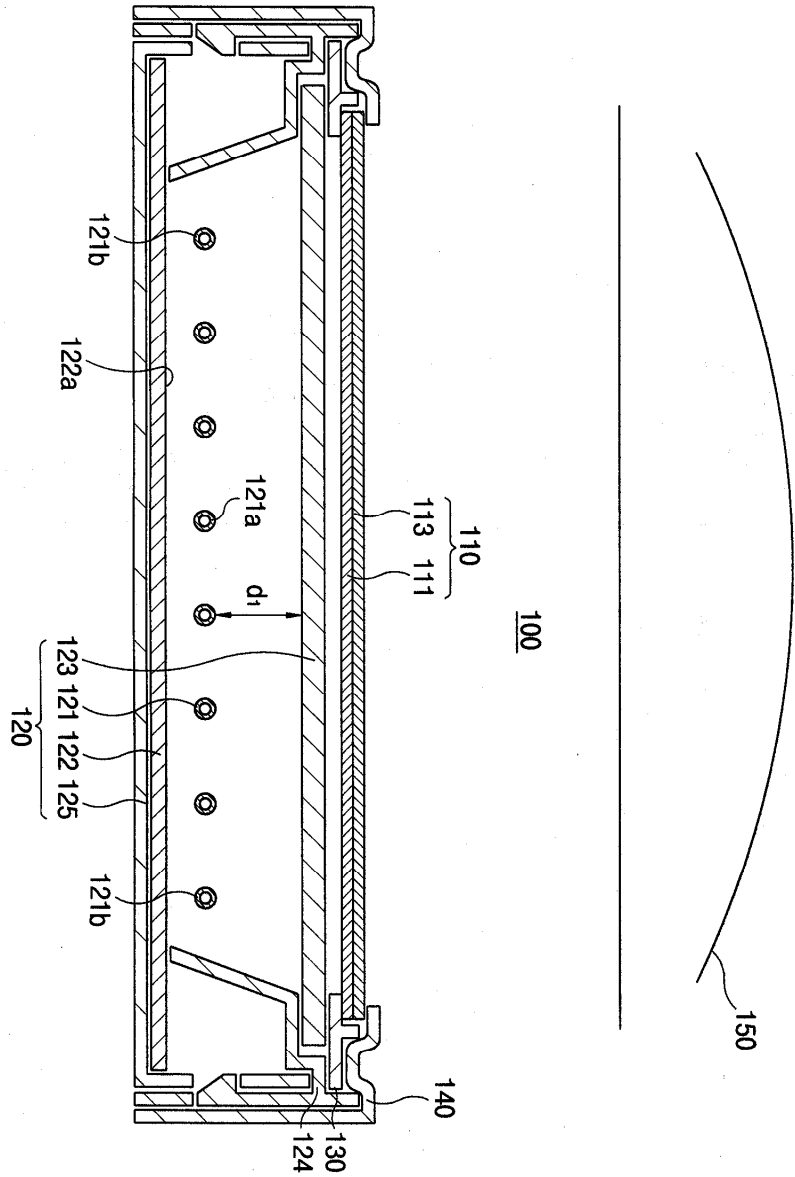
18 , ,

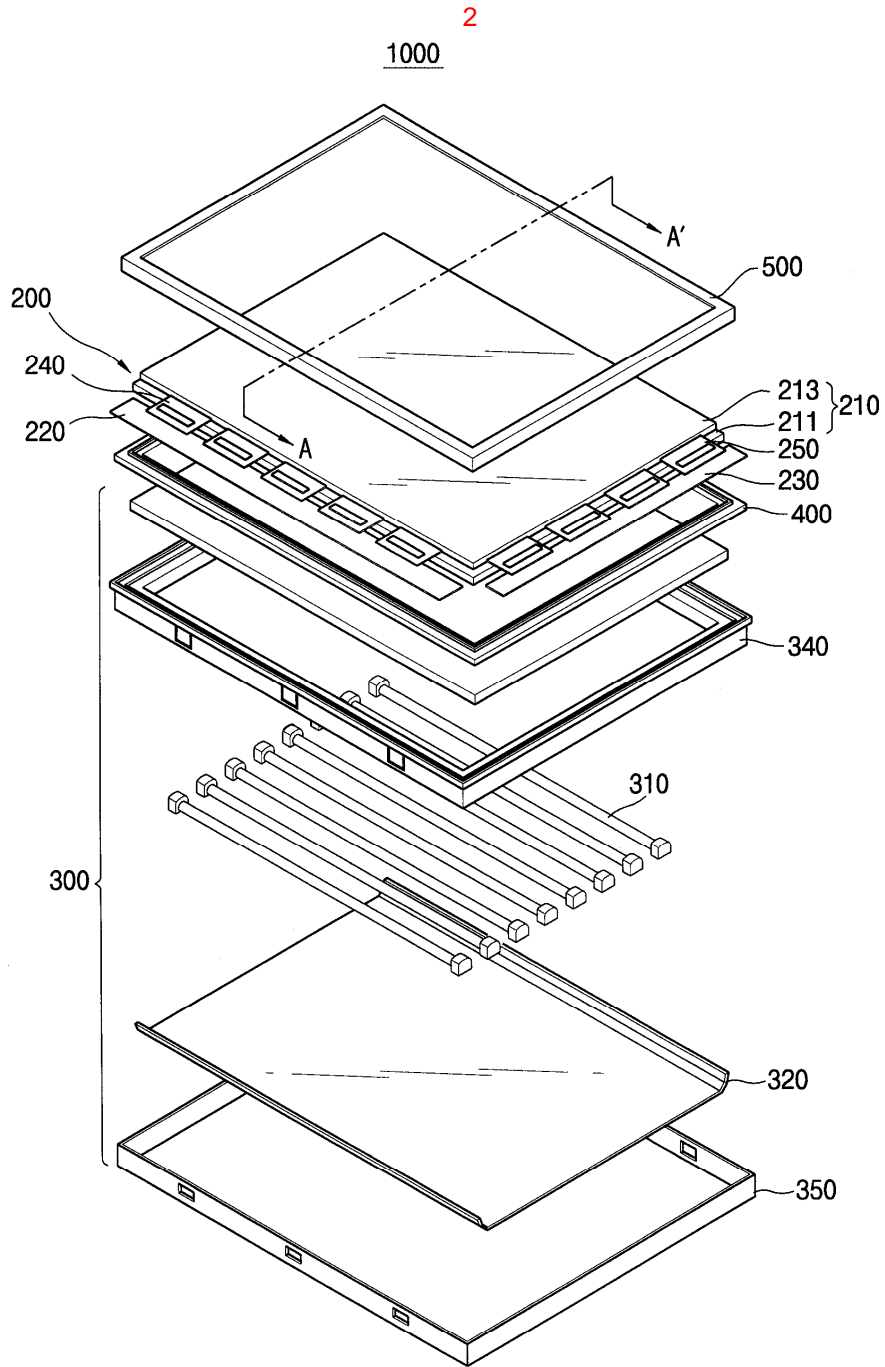
가

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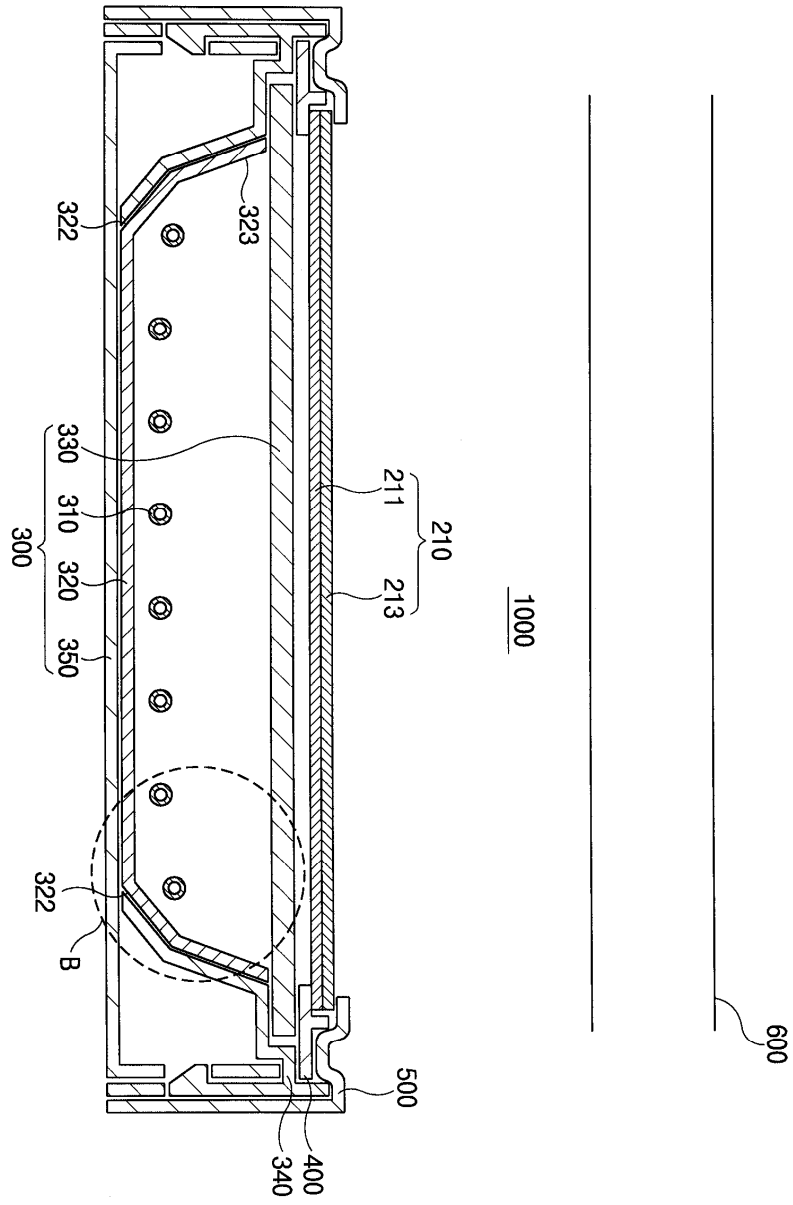
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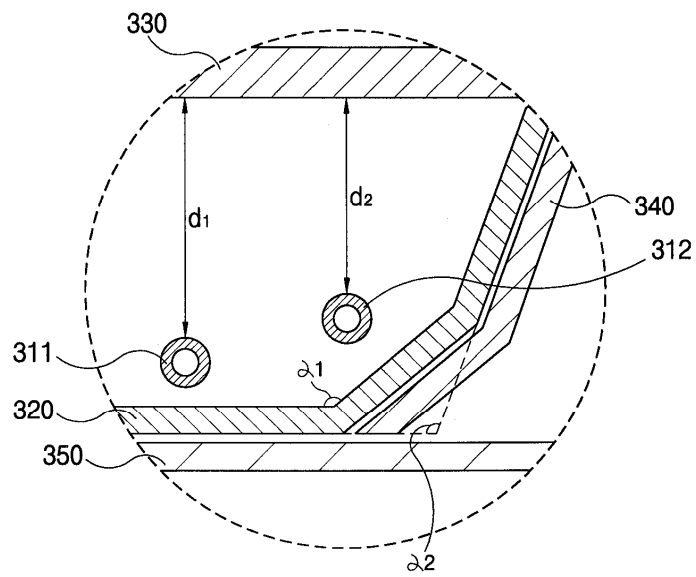


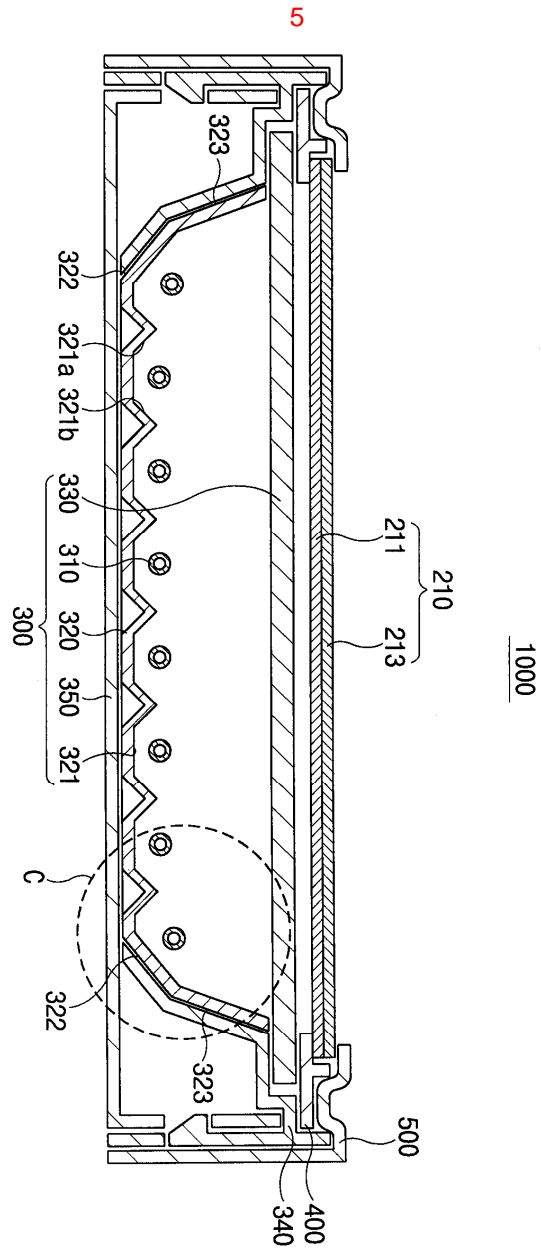


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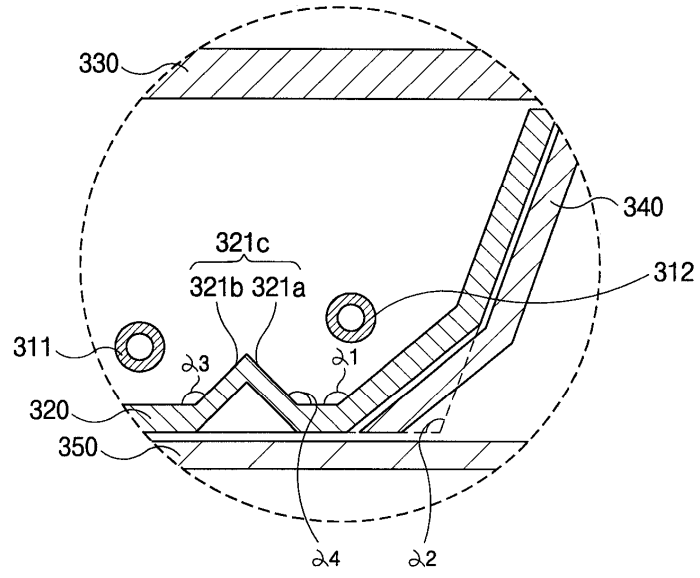


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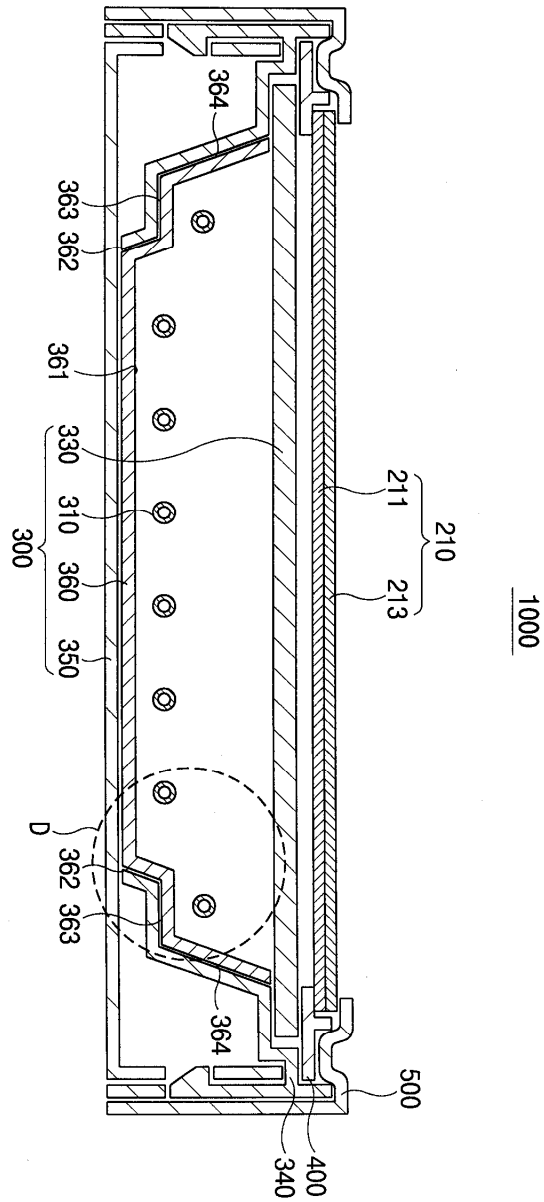




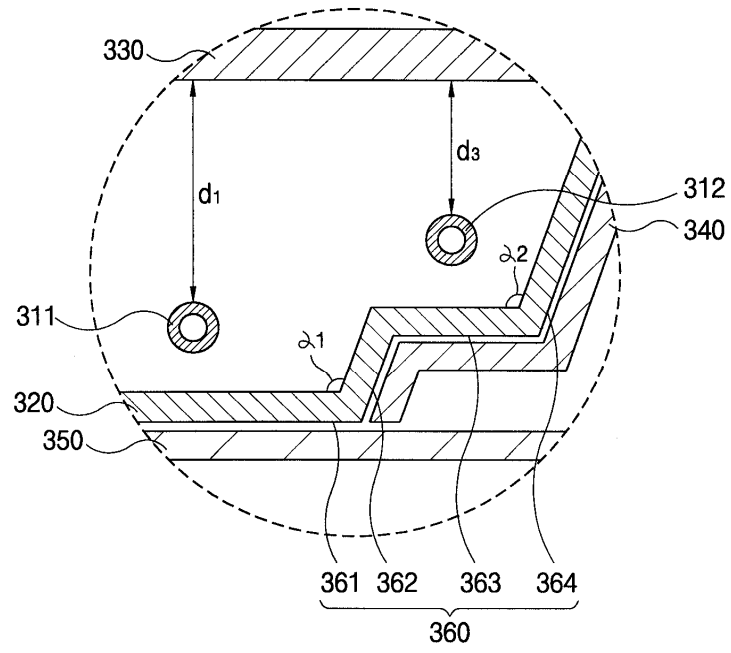
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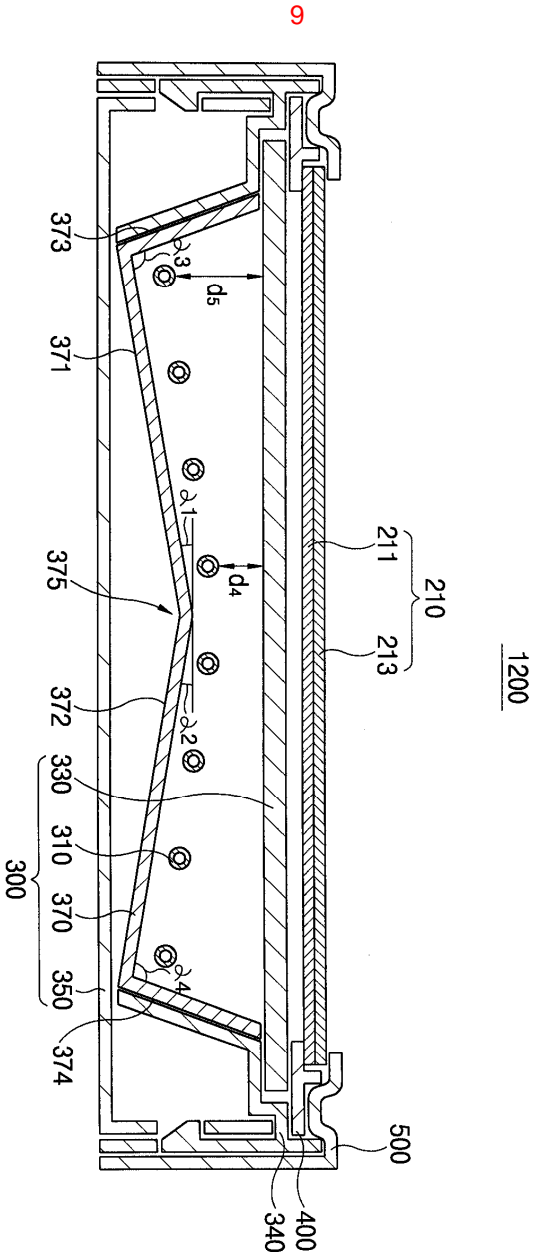


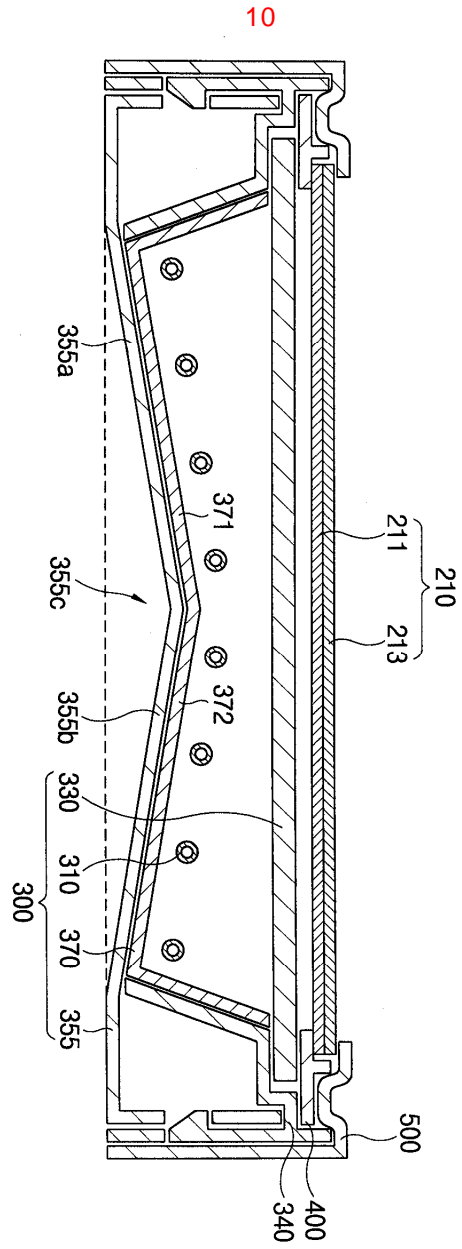
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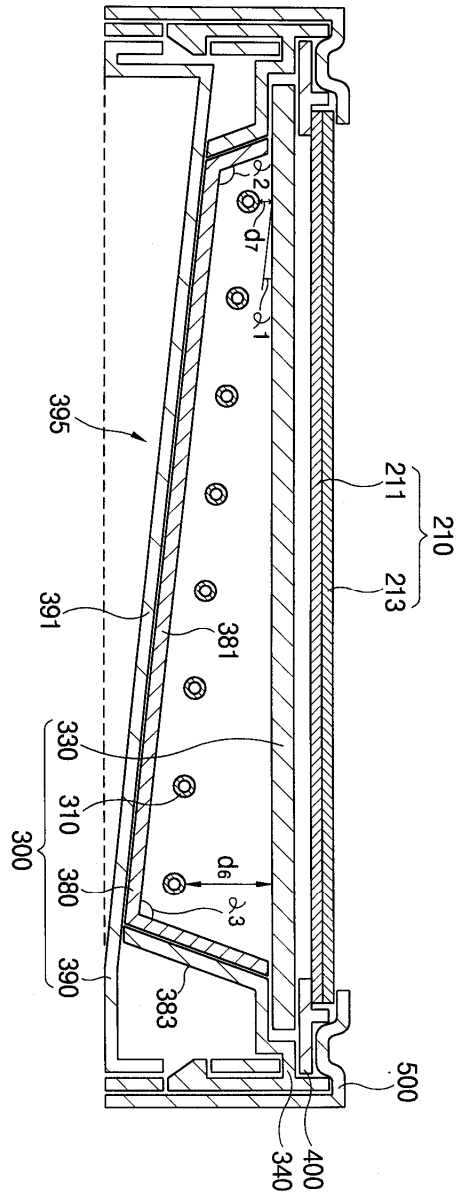
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11



专利名称(译)	背光组件和具有该背光组件的直接型液晶显示器		
公开(公告)号	KR1020040000625A	公开(公告)日	2004-01-07
申请号	KR1020020035132	申请日	2002-06-22
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
[标]发明人	KIM YONGIL 김용일		
发明人	김용일		
IPC分类号	G02F1/1333 F21S2/00 F21Y103/00 G02F1/13357		
CPC分类号	G02F1/133604 G02F1/133605		
代理人(译)	英西湖公园		
其他公开文献	KR100873085B1		
外部链接	Espacenet		

摘要(译)

本发明公开了一种能够在提高显示质量的同时部分调节亮度的背光组件和具有该背光组件的直下式液晶显示器。背光组件和直下式液晶显示装置技术领域本发明涉及一种背光组件和具有该背光组件和至少一个灯的直下式液晶显示装置，一种用于通过均匀化第一光的亮度分布来发射第二光的光漫射构件，和接收构件，用于接收灯和光漫射构件并将第一光反射到光漫射构件，使得光和 - 光漫射构件之间的垂直距离不同。此时，通过适当地改变光漫射构件和灯之间的垂直距离，补偿光漫射构件两端的亮度以改善显示质量，并且可以部分地调节直下式液晶显示装置的亮度。 2

