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(43)

10-2004-0058843
2004 07 05

(21) 10-2002-0085356
(22) 2002 12 27

(71) . 20

(72) 605-212

(74)
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(54)

(switching) 가 (2 Dimension; 2-D) , 3 가 (3 Dimension; 3-D) ,
가 (Cholesteric Liquid Crystal) 3-D (mode) , 2-D 3-D 가 (parallax-barrier)
가 3-D 2-D 가

7

1 (liquid crystal display (LCD) panel) 3 - (pa
rallax barrier)
2 (liquid crystal display (LCD) panel) 3 - (par
allax barrier)
3 (liquid crystal display (LCD) panel) - (parallax barrier) 3
4 3 (liquid crystal display (LCD) panel) 3 가 2 (2 Dimen
sion)

5
 6 5 2 2 (2-D)
 7 5 2 3 (3-D)
 8 6 7 2
 9 가 2 (2-D) 2
 10 가 3 (3-D) 2

< >
 150 : 1 160 : 2
 170 : 161 : 2
 162 : 2 163 :
 164 : 1 165 : 2
 166 : 1 167 : 2
 169 : 190 : 2

tal Display Device) (parallax barrier) 3 (3-D) (Liquid Crys
 , 2-D (2 Dimension) 3-D (3 Dimension) (Display)가 가

「 」 , 「 」
 3 (3 Dimension)
 3
 65mm 가
 2
 3
 3 (Holographic) 가
 (Aperture)

(lenticular) (parallax) (lenticular plate) (integral photography)

(Holographic Display)

가 가

가 가

3 (holographic)

(stereo image) 가 3

(parallax barrier) (parallax barrier) / 가 ()

1 (liquid crystal display (LCD) panel) 3 (pa

age) (左眼) (image) (左眼) (pixel)(L) (右眼) (im

D panel) (右眼) (pixel)(R) (LCD panel)(10) (backlight)(20)가 (20) (LC

(10) (40) (10) (parallax barrier)(30)

barrier)(30) (R) (L) (slit)(32) (parallax b

rier)(34) 가 (40) 가 3 (parallax bar

r)(30) (slit)(32) (34) (parallax barrie

(parallax barrier) 3 (40) (10) (L)

(20) (parallax barrier)(30) (32) (40) (10) (L1)

(40) (20) (L2) (34) (40) (40) (L)

barrier)(30) (32) (40) (40) (40) (R) (parallax ba

(R2) (34) (R1) (10) (R)

(L) (40) (R1) (40) (40)가 (L1) (R)

가 (40) (R1) (40)가 (R1) (視差)

(L) (parallax barrier) 3 (R)

(34) (L2, R2)

(liquid crystal display (LCD) panel) 3 2 가 2

(parallax barrier)

(R) 가 (10) (parallax barrier) (10) 가 (3) (parallax barrier)(30) (L) (backli 1 (20)가 (10) (parallax barrier)(30) (10) (parallax barrier)(30)가 (20) (10) (parallax barrier)(30) (10) (parallax barrier)(30)가 (40) (2) (40) (parallax barrier)(30) (L) (32) (40) (R) (L) (parallax barrier)(30) (34) (20) (40) (R) 3 (liquid crystal display (LCD) panel) (parallax barrier) 3 3 (L) (R) 가 (50) (parallax-barrier)(62) (switching display)(60)가 (backlight)(70)가 (50) (R, L) 가 (thin film transistor) (50) 3 (R) (L)가 (2) (50) (60) (60) (parallax barrier)(6 (60) (60) 가 (barrier)(62) (70) 가 (parallax barrier) (slit) (80) (70) (parallax barrier)(62) (image) (80) (L) (image) (R) (image) (視差) 가 3 4 3 (liquid crystal display (LCD) panel) 3 가 2 (2 Dimen sion) 4 (60) 3 가 (parall ax barrier)(3 62) (60) / (50) (3 L) (3 R) (image) (image) 2 (2-D) 2D 3D가 3D (60)가 (barrier) 3D 2D 3D 가 20 30% 가 (parallax barrier) (parallax barrier) (barri er) 3 (barrier) 가 (recycling) 가 2-D/3-D 가 가 3 가 2-D 가

(cholesteric liquid crystal)
 가 (parallax barrier) (cholesteric liquid crystal) (image) switching LCD panel (recycling) 가 , . ; 1 2 ; 2 ; ; 1 2 ; ; 2 ; ; 1 2 ; ; 가 2D 3D 가 . 1 , 2 ; 가 2 ; 가 1 2 가 , 275nm 가 , 1 2 (parallax barrier) 3 2 , 2 180 barrier) (slit) (barrier) , 2 3 - (parallax barrier) , 2 3 가 /4 가 , 1 가 , 가 가 가 (image LCD panel) 2 가 가 가 (cholesteric liquid crystal) 2 (image) switching LCD panel (150) (back light unit)(170) 가 2 (160) (180) 가 1 (P1) 2 (P2) 2 (P2) 2 (160) 3 (P 3) . 2 , 3-D 5 가 2 (2-D) 3 (3-D) (parallax barrier) (180) / - (parallax barrier) 가 3 , 2-D (170) /

(image) 2

2 (170) (170)

1 2 (P2) 3 (P3)

2 3 (P2, P3)

5 (switching LCD panel) , 2-D/3-D 가 2 (

6 5 2 2 (2-D) 6 7

6 (163) (160) (161) (162) (170a)

(163) (162) (162) 1 (164)

eric liquid crystal) (166) (166) (163) (nd) 275nm 가 (cholest

1 (161) (stripe) 2 (165) 2 (165) 8

(barrier) (slit) 2 (cholesteric liquid crystal) (161)

1 (167) (167) 1 (169)

(169) /4 (nd) 가

(169) (169) (190)

6 (160) (163) 가 (OFF-state) (160)

1 (barrier) (slit) (170) (190)

(5 150) , 2 (2-D)

(160) , 1 (166)

2 (167)

7 5 2 3 (3-D)

7 (ON-state) 6 1 2 (164, 165) 가 3 (3-D)

(166) 1 (164) 2 (165) (electric field) 가

2 (167) (170) (170b) 가

2 (165) (163b) 6 275nm (nd) 가

7 (barrier) , 2 (Dark) (s

(slit) 8 - (parallax barrier) (Bright)

가 (160) - (parallax barrier) , 5 3

6 7 2 9 10

9 가 2 (2-D) 2

(210R) (166) (200L) (170b) (166) (16)

(210L) (170b) (170b) (mirror effect) (200R) (162)

(170b) (200R) 1 (166) (162) 1 (164) 가

(166) (210R) (162) 1 (163)

(163) 2-D (mode) (163)

180

(163) (nd)가 275nm (210R) (230L)

2 (165) (161) (230L) 2

(167) (167) 2 (167) (240LP) (230L)

/4 (190) 가 (169) (240LP) (240LP) (230L)

5 1 (150) 가 2-D (r

ecycling) 가 , 2-D (mode) 2 (160) 가 2-D

10 가 3 (3-D) 2 (7 170)

가 , 10

(163) 1 (164) 2 (165) 가 (electric field) 가 , 2 (165)

가 2 (163a) 가 (163) 가 1 (163a)

(163b) , 2 (163b) 180

(mode) 200 , 1 (163a) 9 2-D 300

2 (163b) 9 2-D (mode)

10 (163) 2 (163b) (200)

(210R) , 1 (200L) (200)

(7 170) (170b) (170b) (200L) (mirror effec

t) (200R) , 1 (166) (166) 1 (163) 2 (

(166) (210R) (162) 1 (164) (nd)

163b) , 2 (163b)

(230L)

(230L) (161) 2

(167) (167) (230L) (169)

(240LP) (169) (190) 5 1

(150) , (163) 2 (163b) - (parallax barrier)

(slit) , 5 가 3

(7 170) (163) 1 (163a) 가 (300)

(166) 1 (164) (300) (310R) 1 (166)
 (162) 2 (164) (300L) 1 (1630) 1 (163a) (170b)
 (mirror effect) (300R) 1 (166) (166)
 (163) 1 (163a) 1 2 (164, 165) 가 (electric field)
 가 (310R) 2 (163b)
 (163) 1 (163a) (310R) 2 (165) (161) 2
 (167)
 2 (167) (310R)
 2 (170b) (167) (320R) 2 (167)
 (170b) (320R) (320L) 1 (166)
 (330R) 1 (166) (330L) (170b) (166)
 (164) 가 (163) 2 (163b) (330R) 1 (166), (162) 1
 (163) 2 (163b) (330R) (340L) (163) 2 (163b)
 (340L) (340L) (230L) (161)
 (167) (169)
 (169) (340L) (169) (350LP) (190)
 (recycling) 1 (5 150) (166) 2 (167) (recyclin)
 g)
 , 1 (164) 2 (165) (163)
 가 3-D 1 (163a) 180 가 2 (163b) (parallax barri
 (barrier) 2 (163b) (slit) (163a) (recycling)
 (barrier) 1 (163a)
 (cholesteric liquid crystal) (recycling)
 가 3-D (mode)
 , (160) 1 (166)
 2 (167)
 , (parallax barrier) (barrier)
 (barrier) (cholesteric liquid crystal) (barrier)
 (recycling) 2-D 3-D
 100% 가
 , (image) 1 2-D/3-D 가
 2 2 (parallax barrier)
 (barrier) 1 2 (parallax barrier)
 , 2-D/3-D 2-D 가 (mode) 가 3-D (mode)
 3

(57)

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275nm

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(parallax barrier)

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(parallax barrier)

(barrier)

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(parallax barrier)

(slit)

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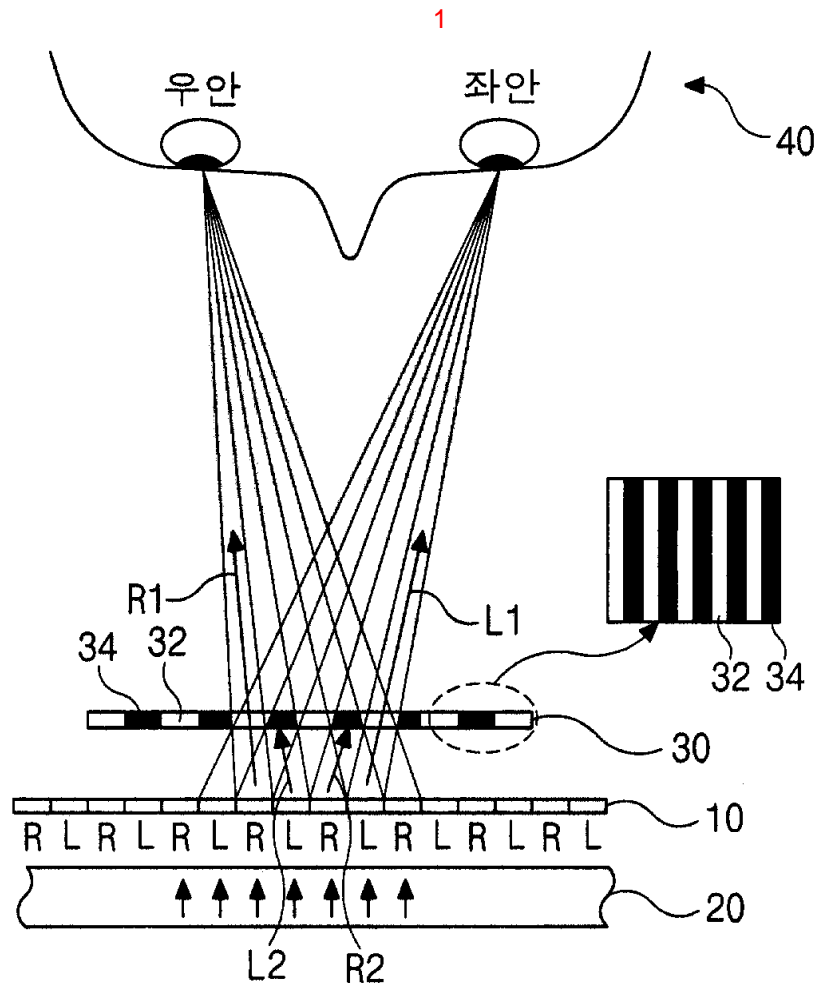
15.

1

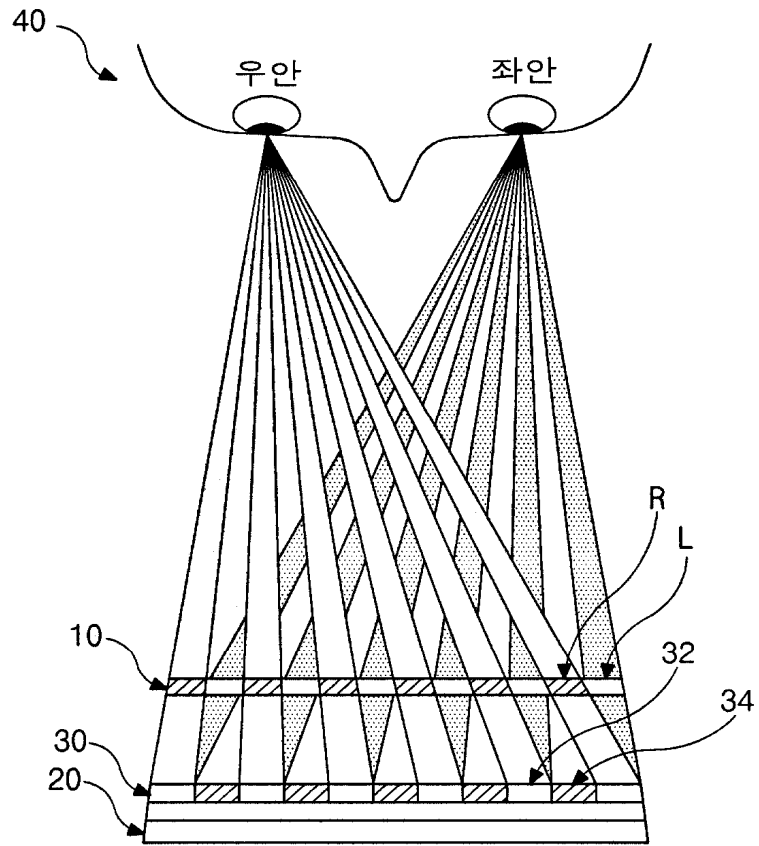
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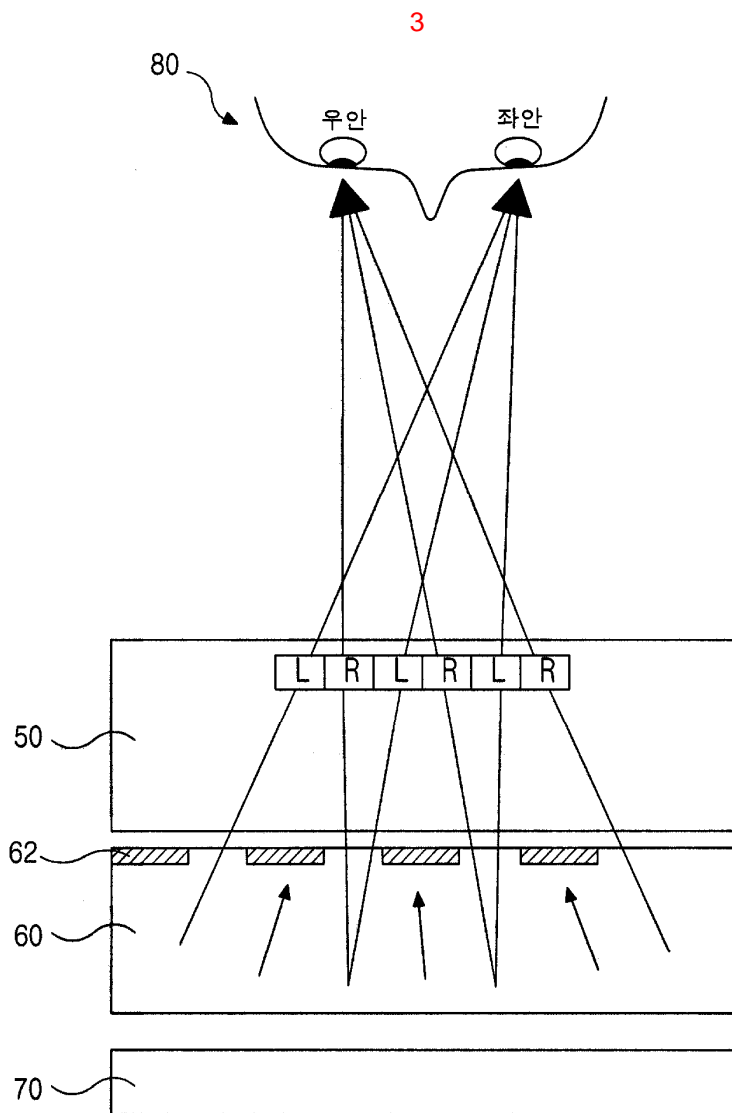
2

1

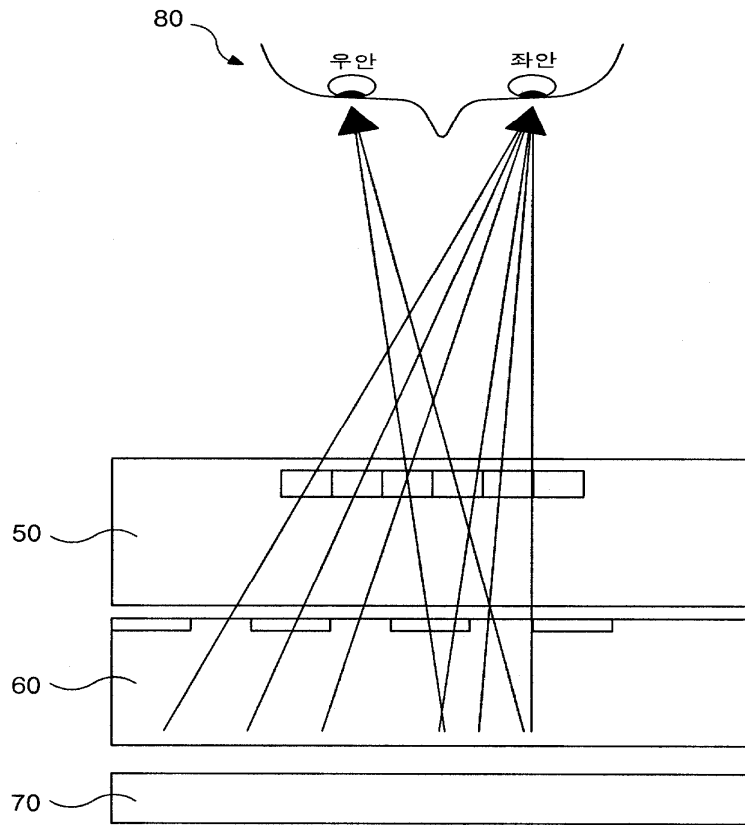


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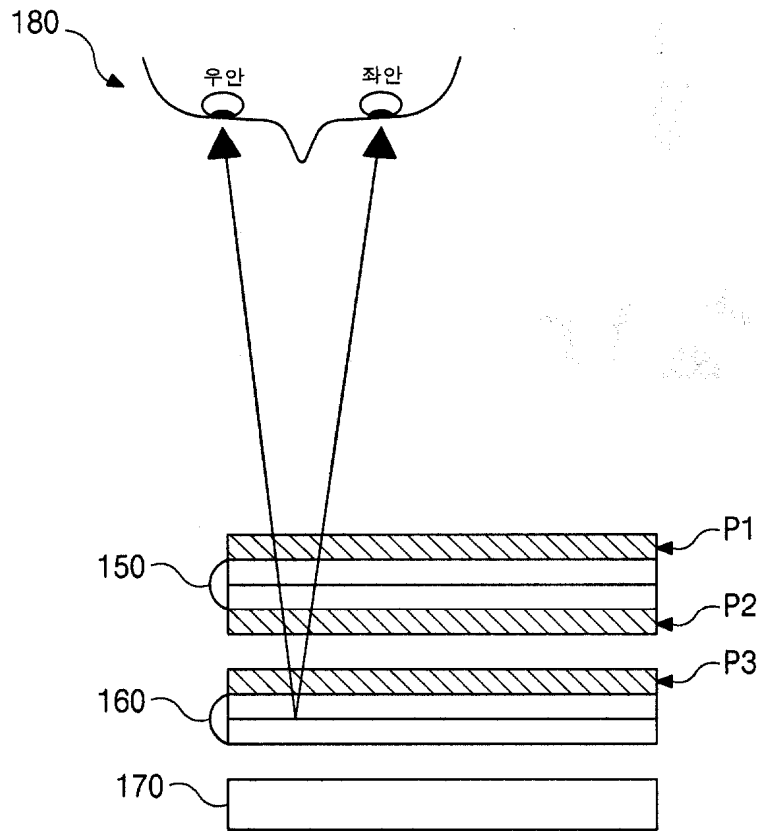


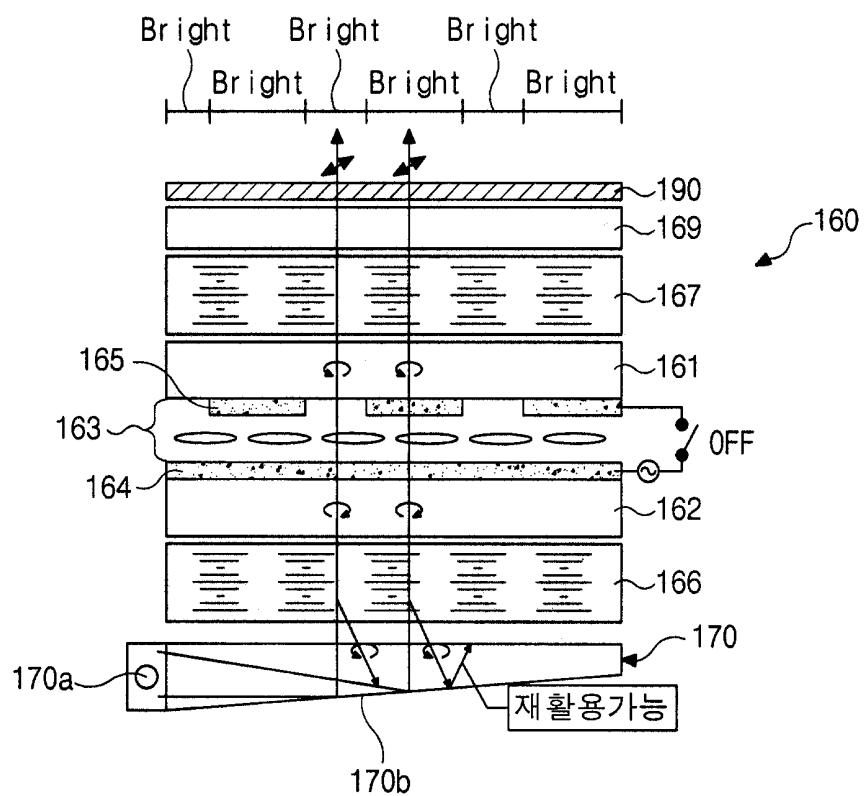


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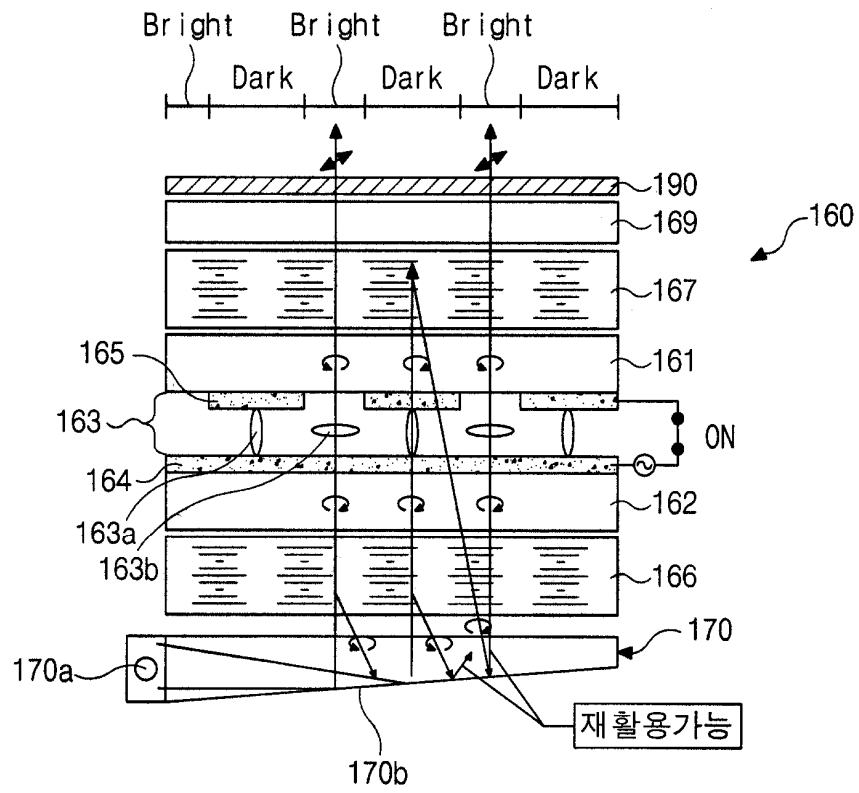


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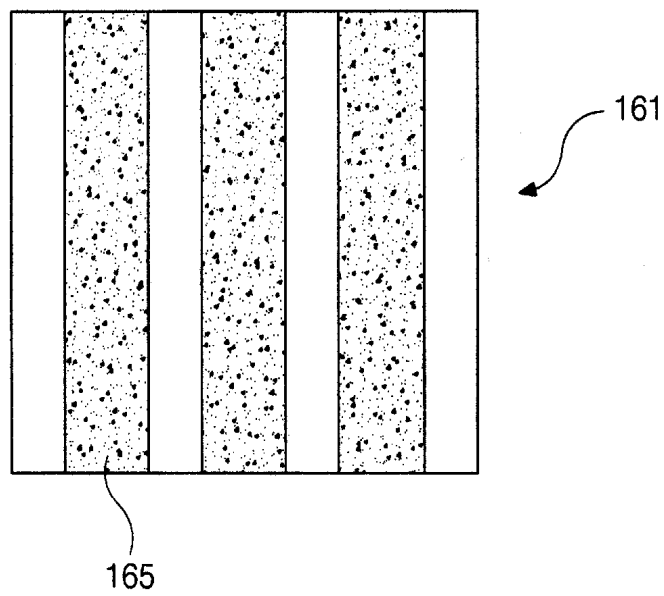




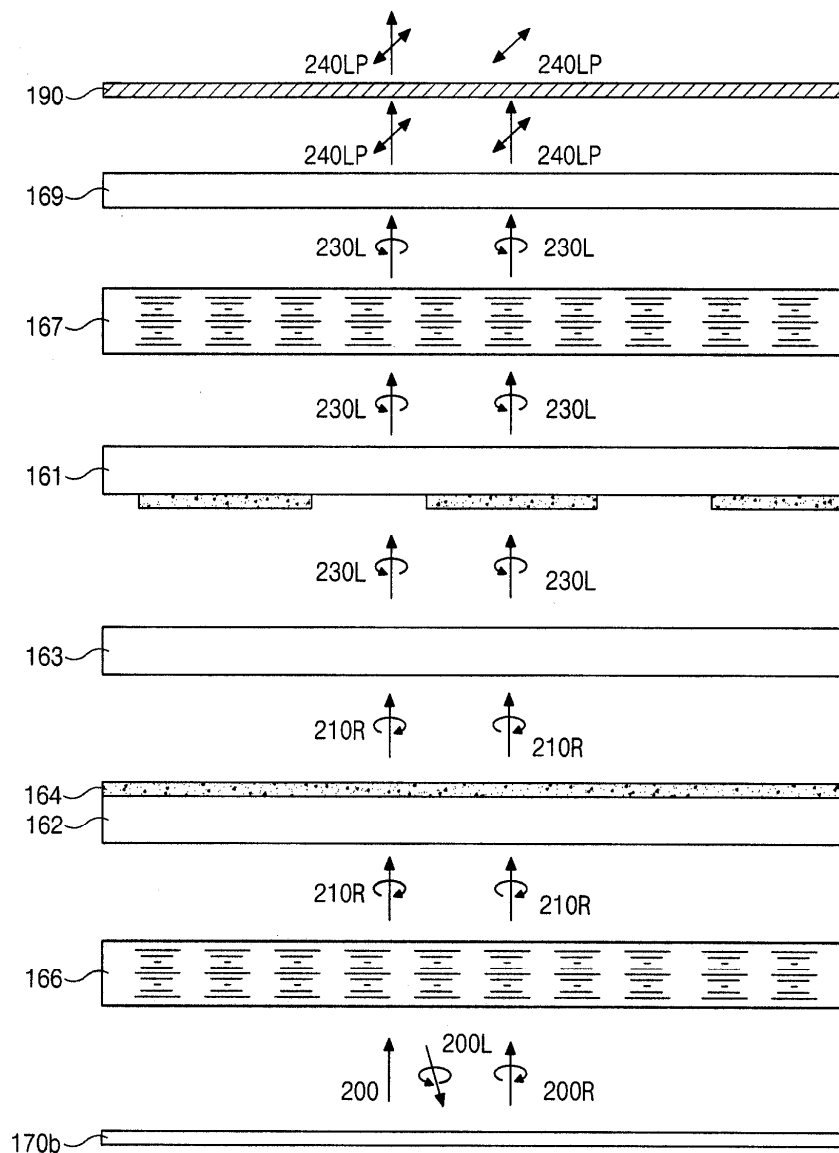
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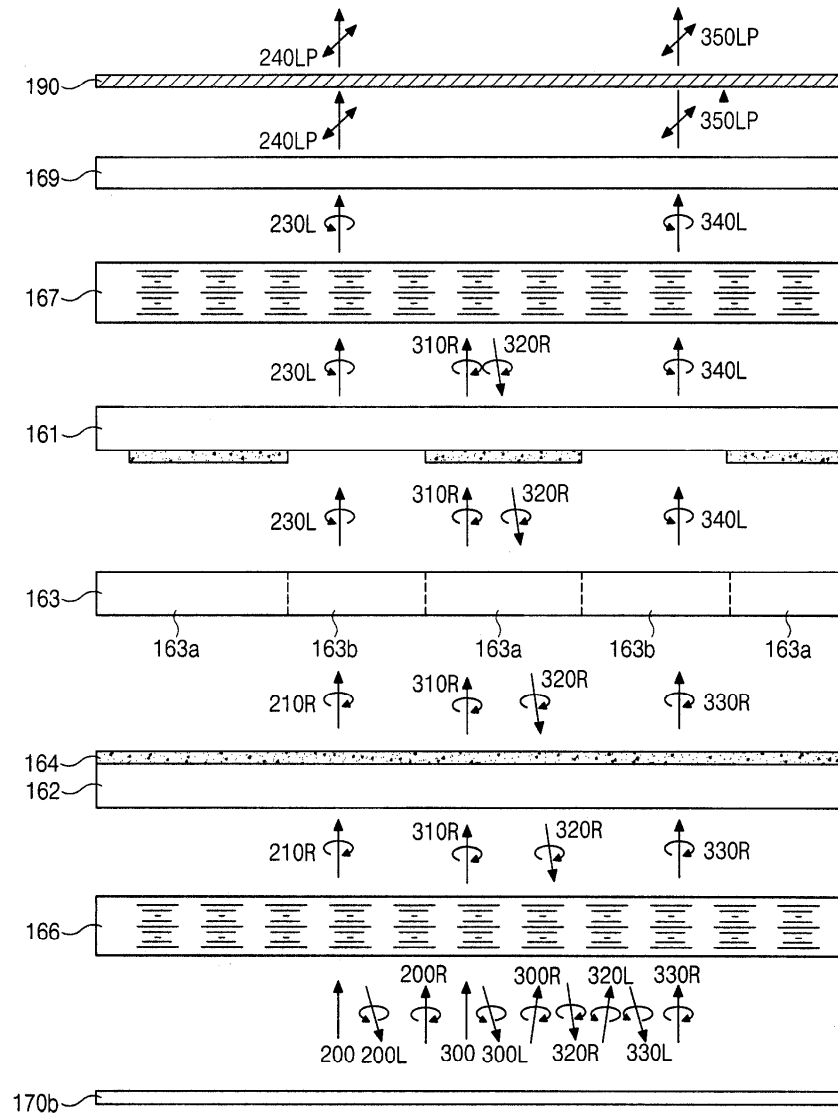
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专利名称(译)	立体图像显示装置		
公开(公告)号	KR1020040058843A	公开(公告)日	2004-07-05
申请号	KR1020020085356	申请日	2002-12-27
[标]申请(专利权)人(译)	乐金显示有限公司		
申请(专利权)人(译)	LG显示器有限公司		
当前申请(专利权)人(译)	LG显示器有限公司		
[标]发明人	SON HYEONHO		
发明人	SON,HYEONHO		
IPC分类号	G02F1/1335		
其他公开文献	KR100887673B1		
外部链接	Espacenet		

摘要(译)

本发明涉及一种尺寸图像显示装置，其中尤其是观看者不佩戴眼镜作为尺寸图像显示装置。特别地，关于能够转换（切换）二维（2维：2-D）图像和3D（3维：3-D）图像的显示装置可以一起表示。此外，在3-D和2-D的可切换图像显示装置中，使用两个液晶面板。另外，即使在3-D模式中使用其中的视差屏障（视差屏障），并且观看者不使用偏振玻璃之类的附带意味着感觉到虚拟立体视觉图像。而且，克服了使用3-D显示器中的胆甾型液晶与2-D显示时间相比亮度降低的缺点，但缺点是具有本发明的特征。

