

가

4

(tapered waveguide), (viewing angle), (viewing screen)

play) , 가 ((off - screen display) (Zimmerman) 5,481,385 (direct view dis

(viewing angle)

(off - axis angles)

(> 60 °)

(< 20 °)

(, LCD)

가

5,481,385 (: 1996. 1. 2)

(LCD)

(viewing screen)

LCD

(collim

ated light)

(5 10 °)

1

(12)

(tapered waveguide: 11)

(12)

(13: 1

(14)

(tapered sidewalls: 15)

2

(,)

(101)

(13)

(11)

(101)

,

A

A+B

가

,

B

(11)

(21)

A+2B

가

,

A+nB

(22)

, n

(101)

(total internal reflection: TI

R)

. TIR

(;)

(spread angle: 31)

(101)

3

(15) , (101) (32) (11) (lampblack)

(Hg) (Xe) (UV) / /
(exposure sandwich) UV . 50 5 160

가 200 , 12 ° 20

(101) (13) (15) (11) (14) (101)
(101) , 32

(31)

(11)
가
(ambient light reflection),
가

가

(metallic cone)
가

e enhancement display) LCD (LCD) (5 °) (viewing angl
(horizontal versus vertical viewing distribution)
(,)

(hollow metallic cone)

1

2 1

3 1

4

5

4 (40) (43) 가 (101) (43) (tapered cone waveguide: 40) (12) (CVD) (42) (40) (40) (41) 3

5 (11) (acid wash) (50) (base) 1 (50) (tip) (41) 4 (101) (101) (5 °), 가

6 가 (50) (53) (lampblack) (62) (50) (53)

(Physical Optics Corporation) (101) (40) () (surface relief hologram) (50%) (90%) (62) 6

7 가 (night vision goggles) (71) 가 (72) (aircraft's nose) 가 가 (73) 가 (74) 가 (75)

가

가

가

(57)

1.

가
1
2
1
2
1
1
2

2.
1

3.
1

4.
1

5.

가

6.
5

7.
5

8.

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,

9.

8

,

10.

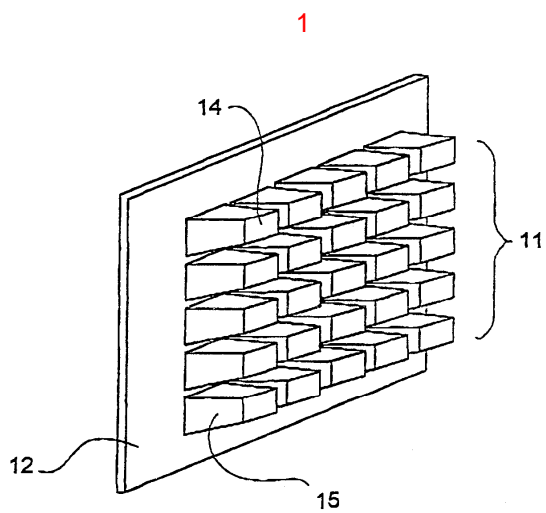
8

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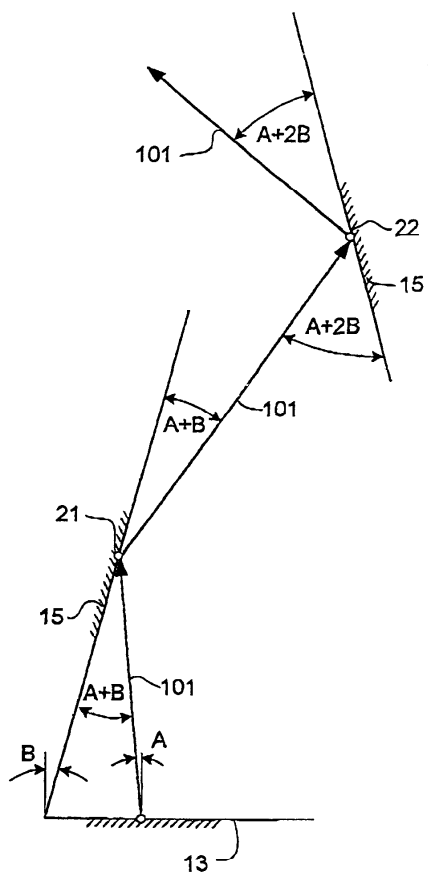
11.

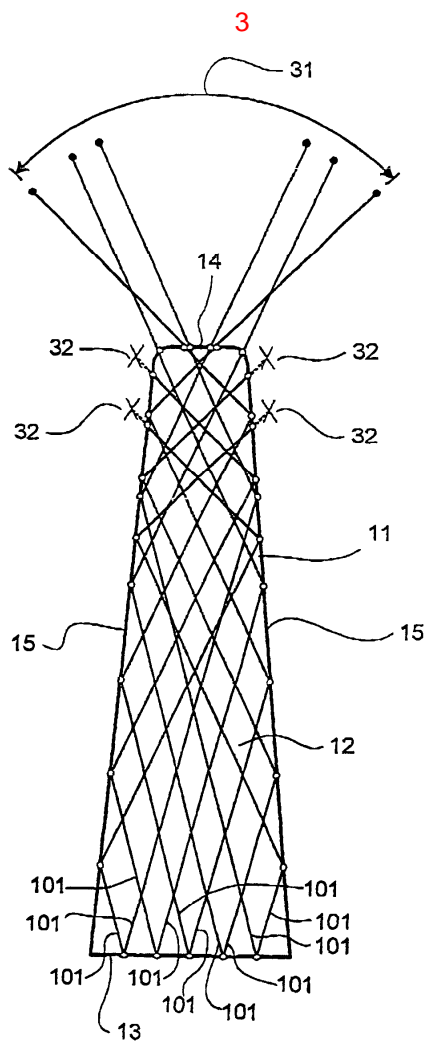
8

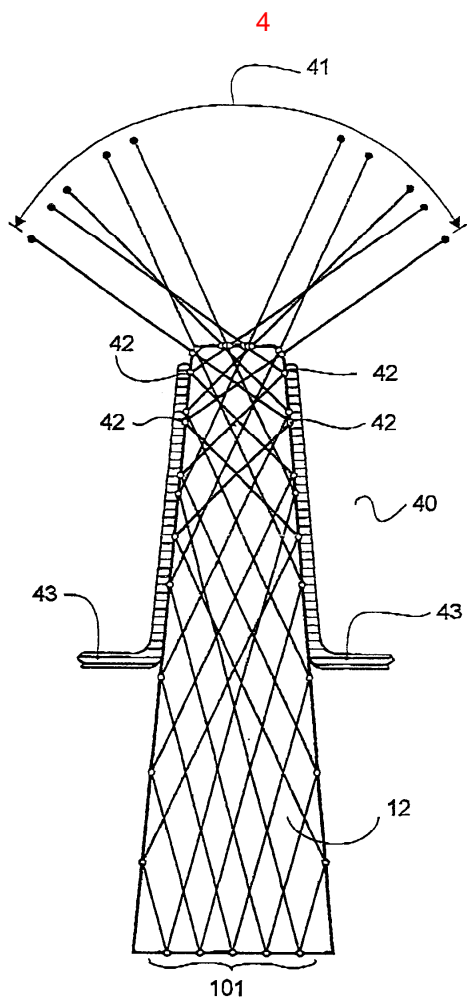
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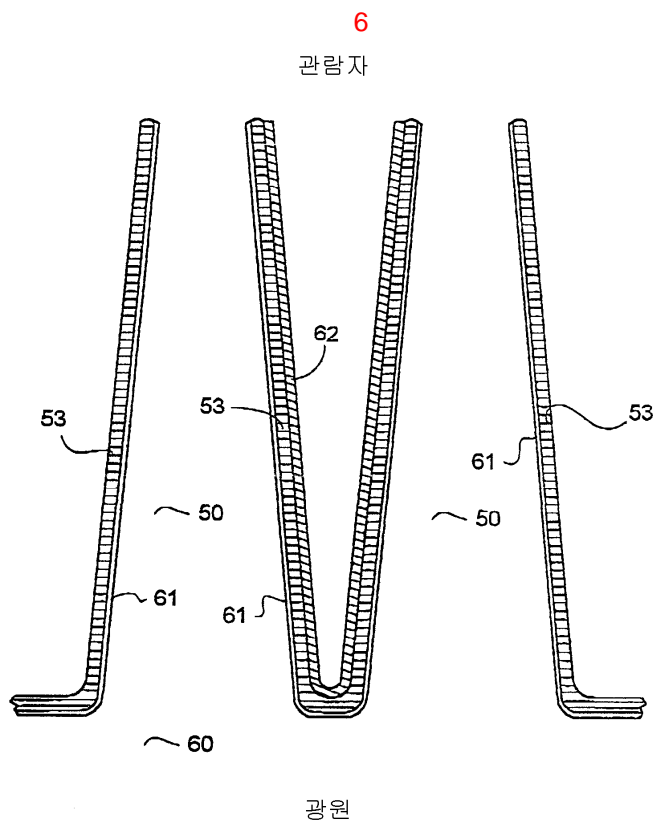
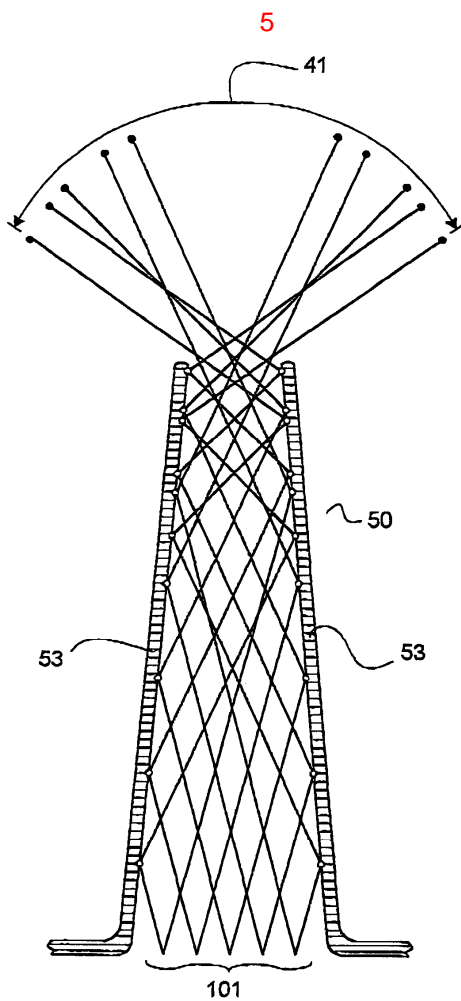


2

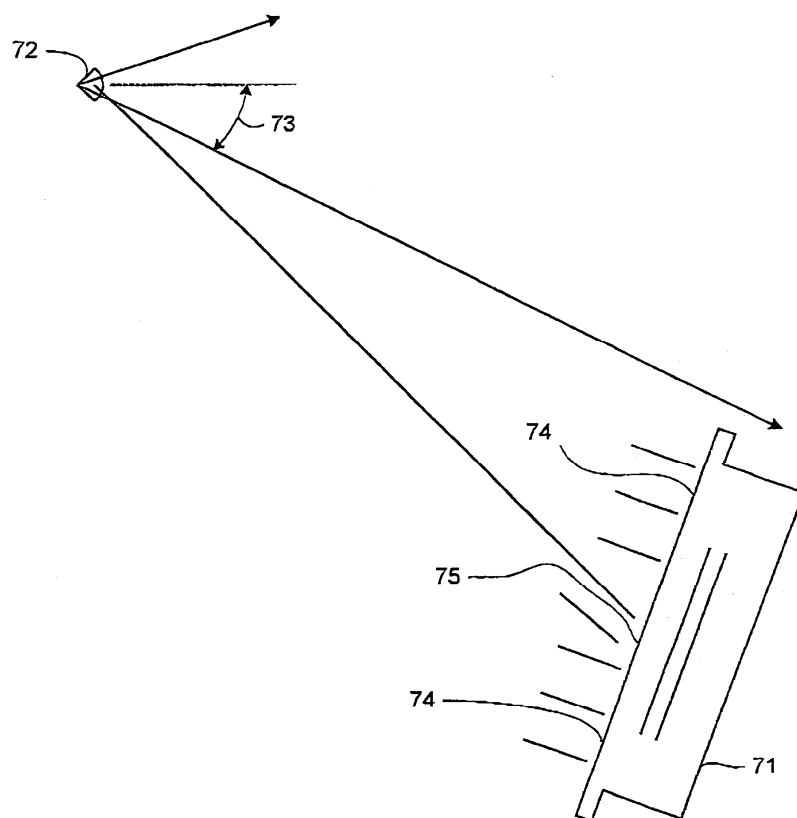








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专利名称(译)	显示屏采用金属处理的锥形波导		
公开(公告)号	KR1020030034196A	公开(公告)日	2003-05-01
申请号	KR1020037004017	申请日	2001-09-18
[标]申请(专利权)人(译)	霍尼韦尔国际公司		
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CPC分类号	Y10S385/901 G02F1/133524		
优先权	09/665026 2000-09-19 US		
外部链接	Espacenet		

摘要(译)

用于增加显示器视角的观看屏幕，如根据本发明的液晶显示器，包括金属处理的锥形波导。锥形波导，视角和观察屏。

