



[illegible]

1 가  
2 ,  
3 4  
4  
5 InSb  
6 Hg<sub>1-x</sub>Cd<sub>x</sub>Te 가  
7 (immersion optics)  
8 (Winstone cones)  
9 가  
10 -

1 (thermal imaging system) (1)  
(2) (dynamic infrared scene projector) (3)  
(4)  
(1) (bolometric detector) (photo  
voltaic detector) (3) 2  
(~100Hz)  
(3) 가 (luminescence)  
2 ( , )  
( , ) (5)  
가 , 5 (6) 5 (7) 가  
(aliasing) 4 ( , - 2 )가  
InSb 256 x 256 , 512 x 512  
2  
가 ,

3 4 In<sub>1-x</sub>Al<sub>x</sub>Sb Hg<sub>1-x</sub>Cd<sub>x</sub>Te , x  
am milling) (mesa etching) (ion be  
3 , p<sup>+</sup> (8) In<sub>0.85</sub>Al<sub>0.15</sub>Sb 4 p<sup>+</sup> - p<sup>+</sup> - n  
InSb (9) (molecular beam  
epitaxy) [T.Ashley , Sci. Tech. 8 S386(1  
993)].  
p<sup>+</sup> (10) In<sub>0.85</sub>Al<sub>0.15</sub>Sb (8) n<sup>+</sup> (11)  
1μm 가 (Si) 2 x 10<sup>18</sup> cm<sup>-3</sup> p<sup>+</sup> (10) p<sup>+</sup> (8)  
1μm 200 가 (Be) 2 x 10<sup>18</sup> cm<sup>-3</sup> In<sub>1-x</sub>Al<sub>x</sub>Sb (8)  
x 0.15 (12) 1.3μm 300μm p<sup>+</sup>  
(10) / (13) p<sup>+</sup>  
(10) , 0.7μm  
(anti reflection coating)  
4 , Hg<sub>1-x</sub>Cd<sub>x</sub>Te , 3 p<sup>+</sup> - p<sup>-</sup> n<sup>+</sup> G  
aAs [S.J.C. Irvine , Mat  
erials Letter 2, 305(1984)].  
(15) x=0.184, p<sup>+</sup> (16) x=0.35, n<sup>+</sup> (17) x=0.23 p<sup>+</sup>  
7x10<sup>15</sup> cm<sup>-3</sup> 1x10<sup>17</sup> cm<sup>-3</sup> n<sup>+</sup> 3x10<sup>17</sup> cm<sup>-3</sup>



가

1 MHz

가

(57)

1.

가 (luminescence; 14) (5) 가 (3); (C)

2.

가 (14) (5)

1

(5) 3 5  $\mu\text{m}$  (radiation)

3.

1

(5) 8 13  $\mu\text{m}$  (radiation)

4.

1

3  
(5)

5.

4

(5) (mercury cadmium telluride;  $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ )

6.

4

(5) (indium aluminium antimonide;  $\text{In}_{1-x}\text{Al}_x\text{Sb}$ )

7.

4

(5) (mercury zinc telluride;  $\text{Hg}_{1-x}\text{Zn}_x\text{Te}$ )

8.

4

(5) (indium thallium antimonide;  $\text{In}_{1-x}\text{Tl}_x\text{Sb}$ )

9.

1

3  
(5)

10.

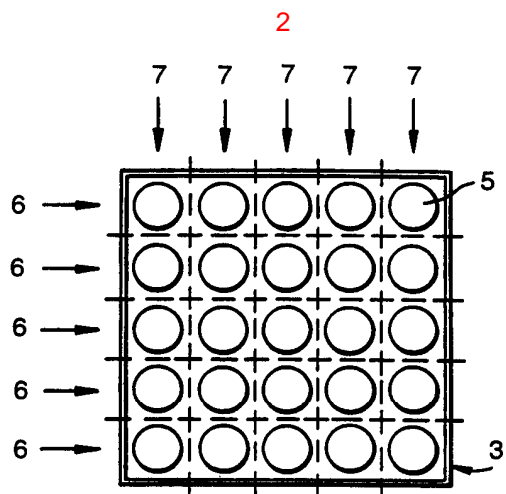
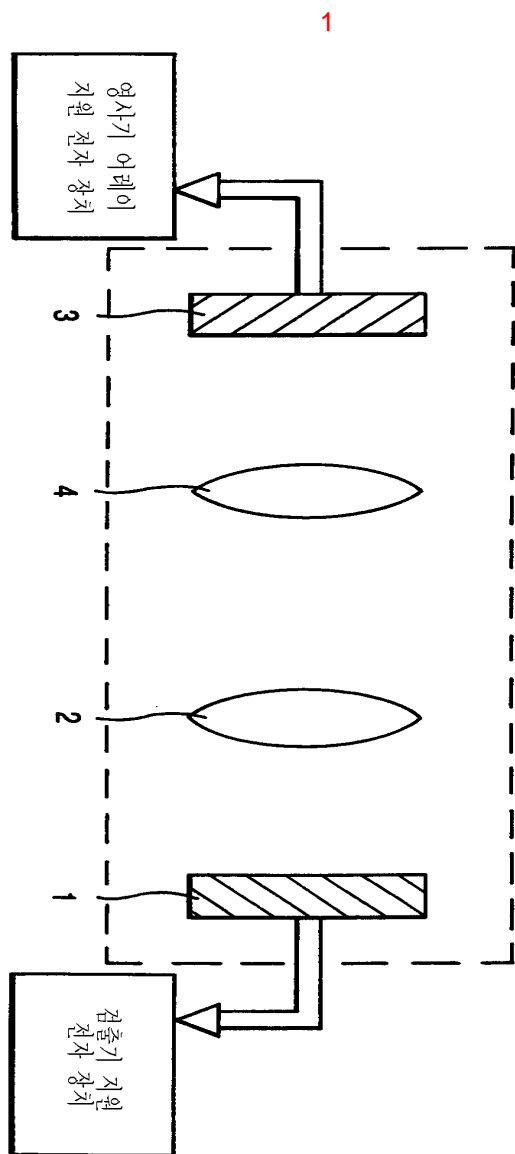
9

(Winston cones; 32)

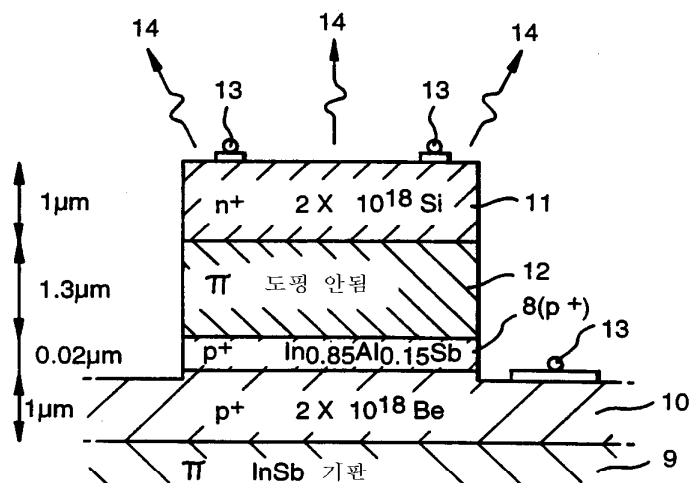
11.

9

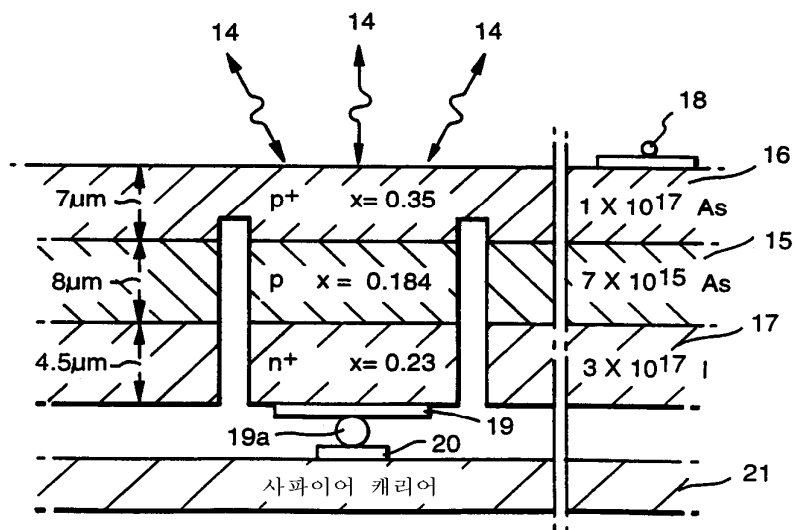
(30)

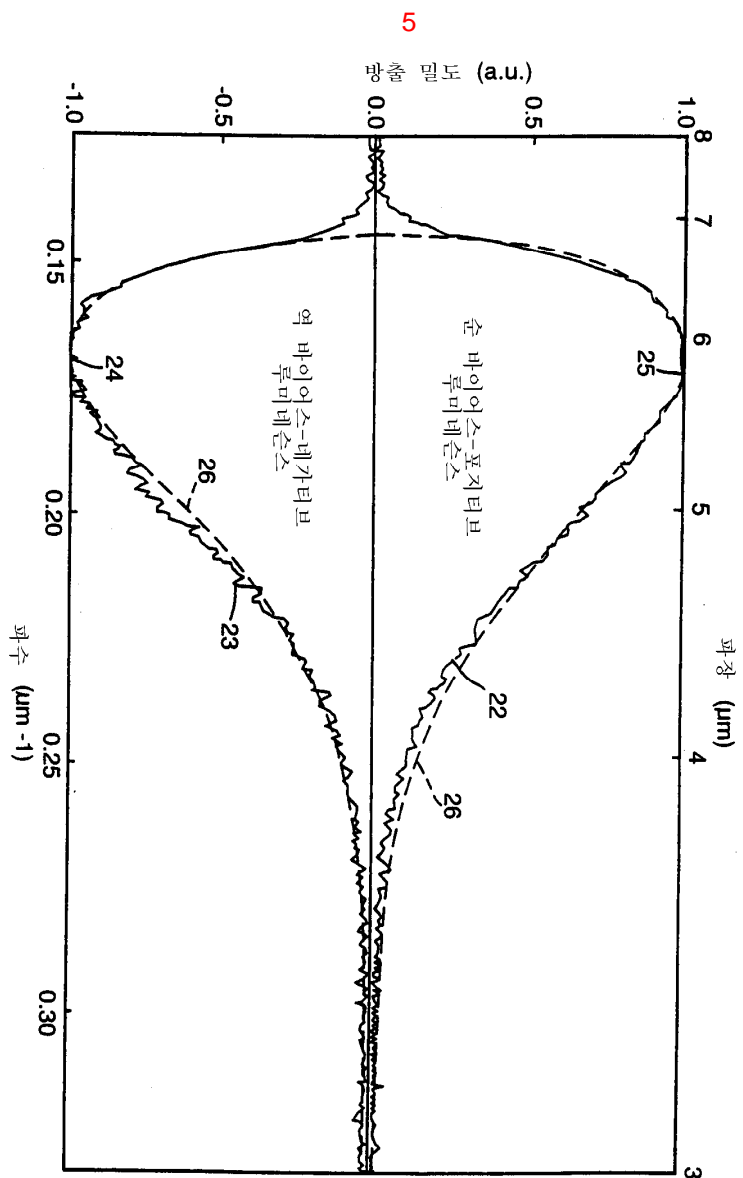


3

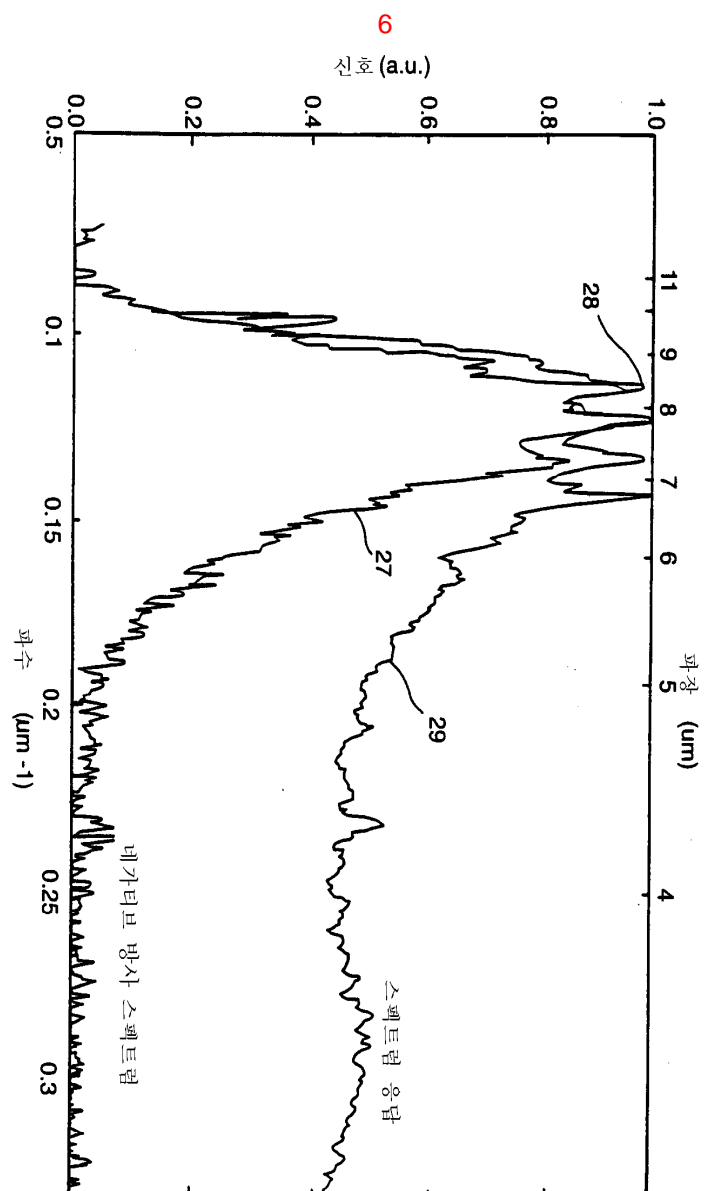


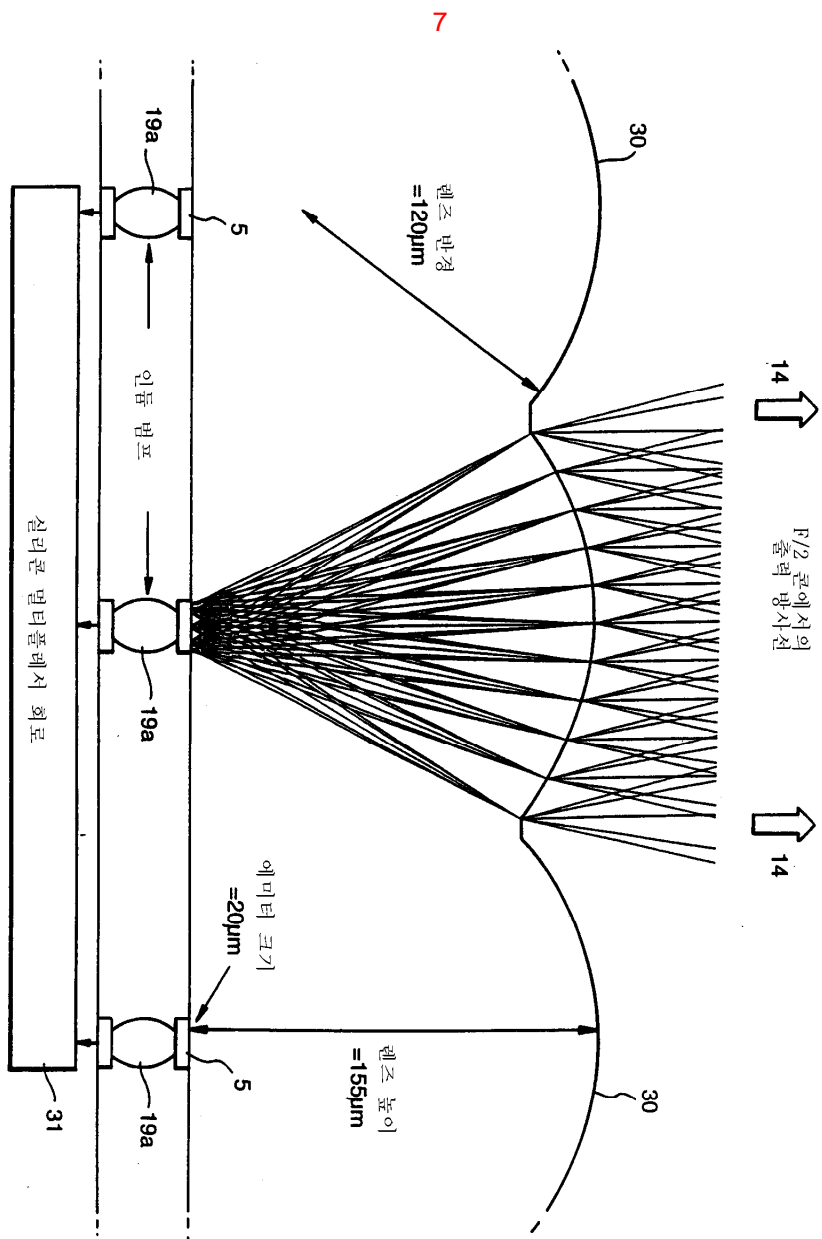
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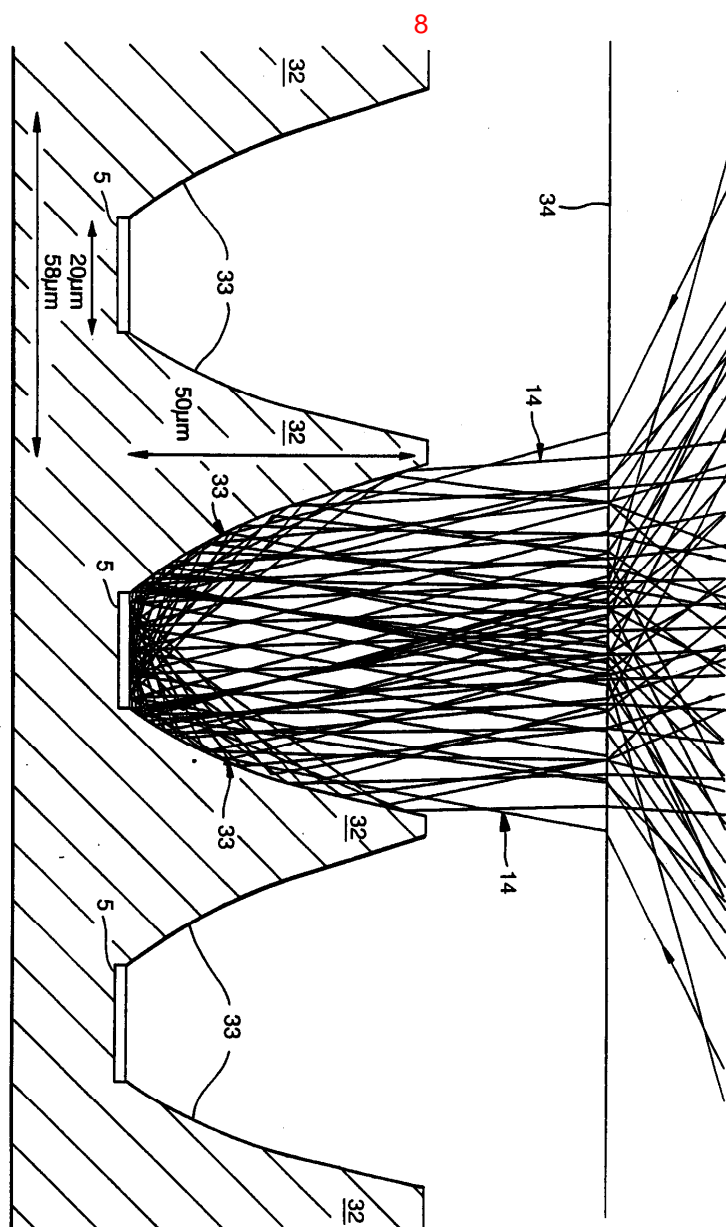


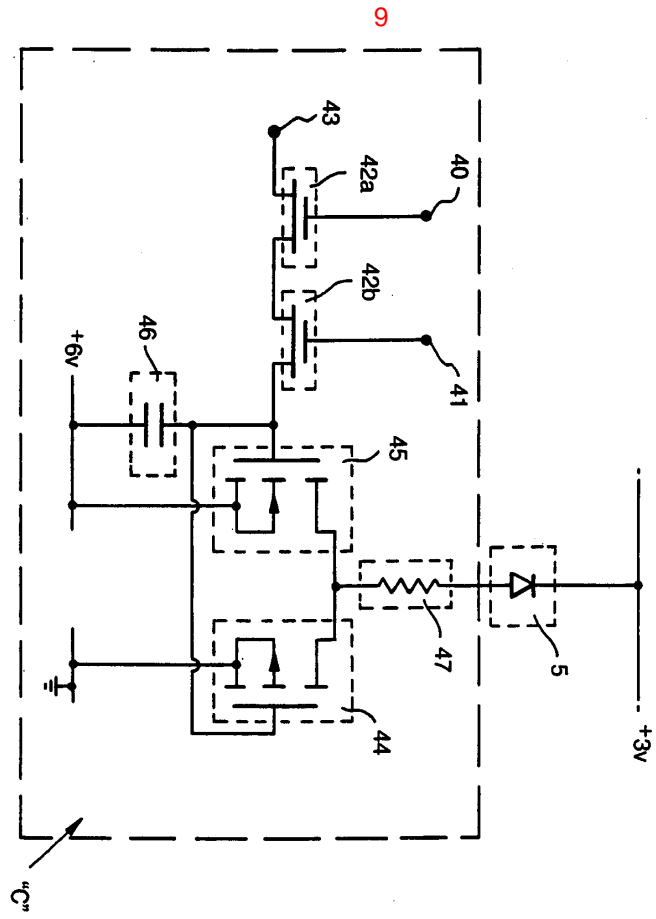












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