

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl. 7
H01L 21/027

(11)
(43)

2002 - 0090686
2002 12 05

(21) 10 - 2001 - 0029663
(22) 2001 05 29

(71) 136 - 1

(72) 6 603 - 1303

(74)
:

(54)

가 (crosslink agent)가 , 1 (bake process)
가 1 가 1 1 2
2 가 1 가 2
가

6

1 6

< >

11 : 12 :

13 : 1 14 :

15 : 가 16 : 1

17 : 2 18 : 2

가 (crosslink agent) UV -
 가 (diffusion) (double c
 coating) 가 .
 tation) (image sensor) N - (deep N - implan
 ?? N - 가 . (channeling)
 , (barrier)
 , (overlay control)
 , UV - (ultra violet - bake)
 N -
 가 N -
 ixing) 가 가 , UV (intensity) UV -
 (interm
 가 (crosslink agent) 1
 가 가 1
 가 .

1
 가 가
 가 1
 2 , 2 1
 1 6
 (11) (12) (12)
 (12) 1 ()
 1 (13)
 가 (15)가 (14) (14)
 ARC(top anti reflecting coating) (water soluble)
 가 (15) (multi - functional ether)
 (multi - functional alkyl halo compound)가
 (methyl ether) (ethyl ether)가
 (alkyl chloro compound), (alkyl bromo compound)
 (alkyl iodo compound) . (2)
 (14) 가 (15)가 1 (13)
 1 (13) 가 (15)가 1 (16) (13)
 (Novolac) (styrene polymer) (-OH) 가 (crosslink)가
 2 . (3)
 (14) (deionized water ; DI water) 1
 (16) . (4)
 2 (17) . (5)
 (18) , 2 (18) 1 2 (17) 2
 (16)
 2 (18) 2 (18) 1 (16)
 (6)

(crosslink agent)가 , 1 가
 가 1 가 1 (bake process) , 가
 2 가 1 2 .

(57)

1.

1 ,
 가 가 ,
 가 1 ,
 ,
 2 , 2 1

2.

1 ,
 가

3.

2 ,
 50 - 250

4.

1 ,
 가 (multi - functional ether)
 (multi - functional alkyl halo compound)가

5.

4 ,

(methyl ether)

(ethyl ether)가

6.

4 ,

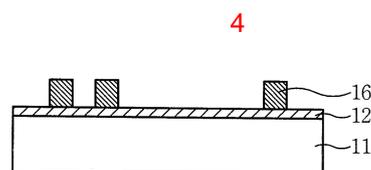
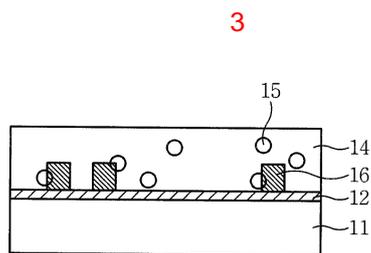
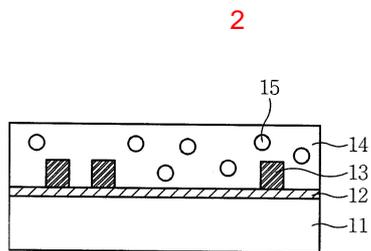
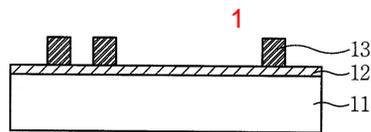
alkyl bromo compound)

(alkyl chloro compound),
(alkyl iodo compound)

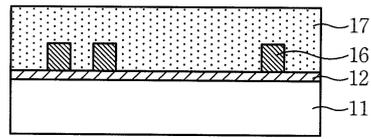
(a
가

7.

1 ,



5



6

