

(19)
(12)

(KR)
(A)

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(71) 312 932 201

(72) 312 932 201

(74)
:

(54)

(暗流狀態) (Coulomb) , (電界) , (Wire) 가

1
 2 1
 3 (+) (-)
 4 ,
 5 (+) (-)
 6 (+) (-)
 7 6
 8 (+) (-)
 9

F : 1 : 2 : 3 :
 4 : (Connector plug) 5 : (Slit) 6 :
 7 : (+) (-) 8a :
 8b : 9 : 10A : (+) DC
 10B : (-) DC 11A, 11B : 가
 12 : H SW1, SW2, SW3, SW4 :
 13 : 14 : 15, 21 : AND
 16, 18, 20, 22 : 17, 19 : NOR
 23, 24 : 25 : 26 :

(Corona) (針狀電極) (接地電極)
 中和) (電離) , ()

9
 狀) (53) (53a) (56) , (54) (51) (55) (52) (坂
 (棒狀) (56) , (51) (55) .
 (57) (53) (53b) (交流) (51) (56) (51) (空間)
 (靜電誘導) 가 , (51) (56) (自續放電) (Corona)
 (51) (56) (放電電流)
 (漏洩電流) , (53b) (53a) , (誘導體)가 ((56) 가 , (54)가 가 가 .
 (51) (56) (絶緣破壞) (逆) ((51) 가 가 .
 가 , (51) (56) (引火性) (防爆規格) .
 (51) 가 (Air purge)
 () ,
 가 .
 가 ,
 가 가 가 가 .
 가

(電界) (Wire)

(暗流狀態)
(Coulomb)

가

(+) (-) (" " ())
가가

가가

(+), (-)

가

가

0.2mm 가

가

1 2

1 가 (1) (1) (2) (2)
가 가 (1) (3) (3) (2)
(2) (4) (5) (1)

3(A) (1) (4) 가 가 가 (6) (7)

(F) [:] (1) 가 (1) , , (F) (F) , () (+) (-) (7) (1) 가가 (1) 가 (F) 가 (1) 가 4 가 -30KV (F) (1) 0.2mm, 0.15mm, 0.0 8mm (1) +4.7KV, -4.0KV, 25 0Hz

[1]

(mm)	35	60	100
-0.08 (KV)	0	-0.2	-0.5
-0.15 (KV)	-0.3	-0.4	-1.3
-0.2 (KV)	-0.3	-1.0	-3.1

0.2mm 가 5 가 -10KV (1) 35m m, (1) 7KV

[2]

(KHz)	0.2	2.0	5.0	7.0	10.0
(KV)	-0.5	-0.8	-0.8	-1.0	-1.2

(F) 가 3(B) , (+) (-) (-) (-) 가 가 (-) 가 가

가
(7) (Inverter)

(1)

250Hz 가 1/250 = 4msec
 30mm 4/30 = 0.133msec
 / 가 451m/ [1 2 (5)]
 $V = 1/0.133 \times 1000 \times 60 \div 1000 = 451m$
 250Hz

6 (7) AC (+)
 (8a) (9) DC (10A) (-) DC (10B)가 가 (11A, 11B)

DC (10A, 10B) H (12) (+)
 (-) [" "] 가 (11A, 11B)

, H (12) 4 SW1, SW2, SW3, SW4
 (13) (8b)

(13) (14) 4 SW1, SW2, SW3, SW4
 AND (15) (ISO) (14) 1 SW1
 NOR (17) (16) 2 SW2
 OR (19) (18) 3 SW3
 (21) (20) 4 SW4 AND N
 (22)

AND (15) NOR (17) (14)
 (23) 가 , NOR (19) AND (21) (14)
 (24) 가

(14) 가 가 , (26)

7 AND (15) (13) , NOR (17) AND (21)
 , NOR (19)

AND (15), NOR (17), NOR (19), AND (21) (16, 1
 8, 20, 22) SW1, SW2, SW3, SW4 , (27)
 가 , 가
 (28)

H (12) 1, 2, 3, 4 SW1, SW2, SW3, SW4 H
(DIODE) D1, D2, D3, D4

H FET 2

(28) 1 2 (SW1, SW2) 3 4
(SW3, SW4) H (12)
(13) 1 , , , , ON/OFF DC (10A, 10B)

[3]

SW1	OFF	ON	OFF	OFF	OFF
SW2	ON	OFF	ON	ON	ON
SW3	ON	ON	ON	OFF	ON
SW4	OFF	OFF	OFF	ON	OFF

1 SW1 2 SW2 (組), 3 S
W3 4 SW4 (組)가 ON 2
SW2 OFF 1 SW1 ON , 3
SW3 OFF 4 SW4 ON ,
3(A) () 가 가

DC (10A, 10B) H (12) V1 V2가 V1=V2
(28) 1 () , (28) 2 E1 E2
8(A) (E1=E2)

, V1 < V2 8(B) E1 < E2 , V1 > V2 8(C) E1 > E2
(27) 8(D) 1 50% 가 (28) 2

(25) 1 5% ,
가 (11A, 11B) (28) 2
8(E) (F) 가 가
(26) 가

(1) 가 가 가 가

(Coulomb)

가

가

가

가

(57)

1.

(Wire)

(暗流狀態)

(電界)

(Coulomb)

2.

1

()

3.

2

(+)

(-)

(Pulse)

4.

3

(Pulse)

가 가

(Pulse)

5.

3

4

(+)

(-)

(Pulse)

(+)

(-)

6.

1, 2, 3, 4,

7.

가

8.

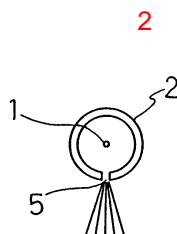
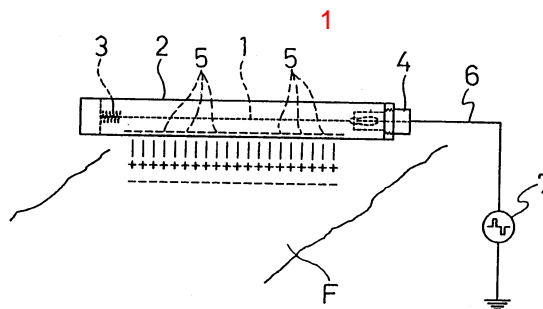
7, 가가 (+) (-)
(Pulse)

9.

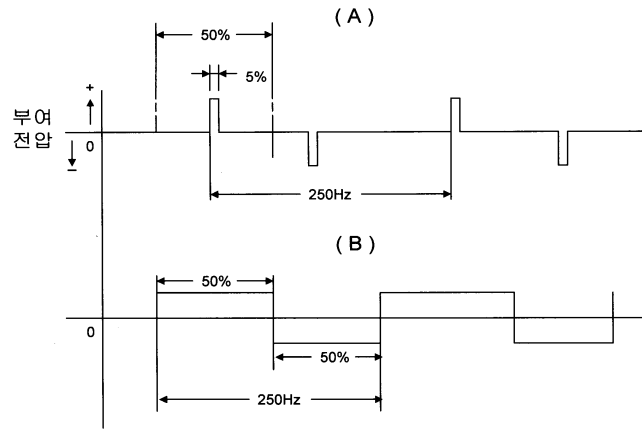
8, (+) (-) (Pulse) (+) (-)

10.

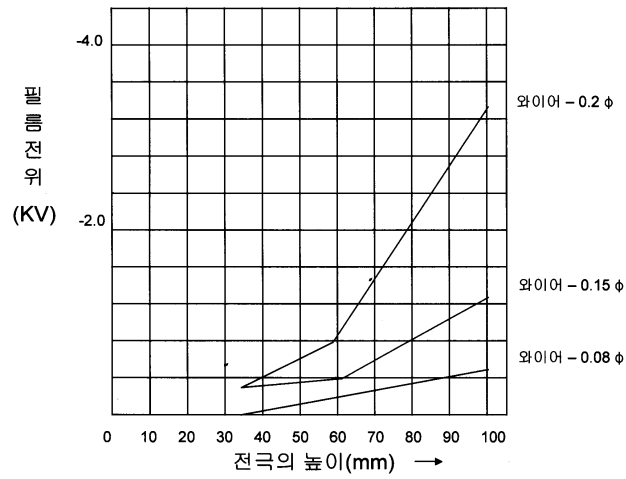
7, 8, 9, 0.2mm



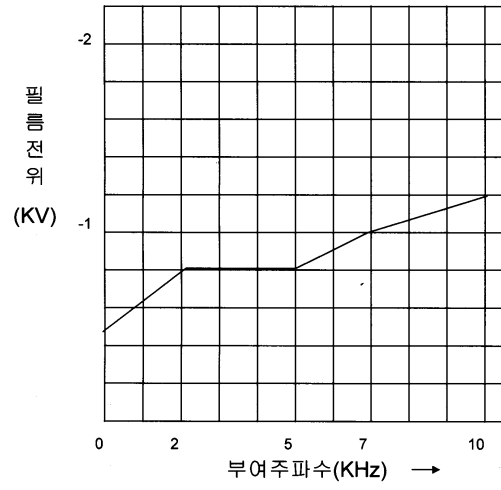
3

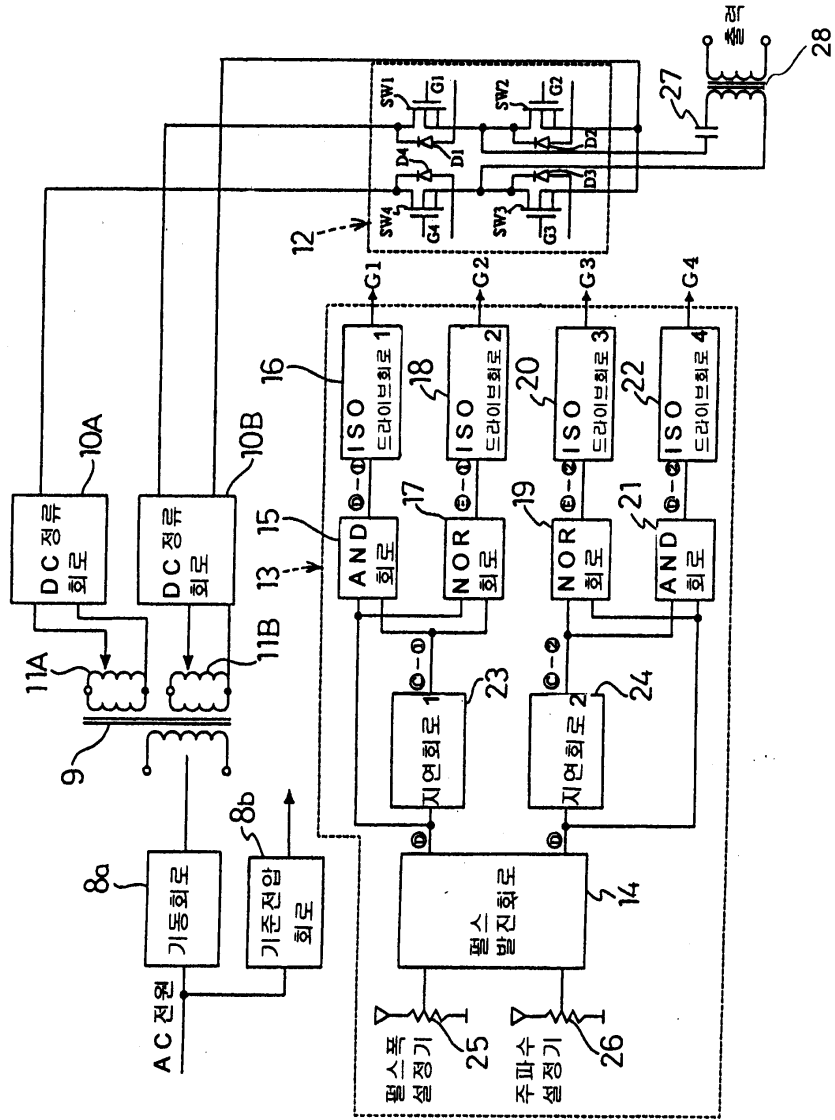


4

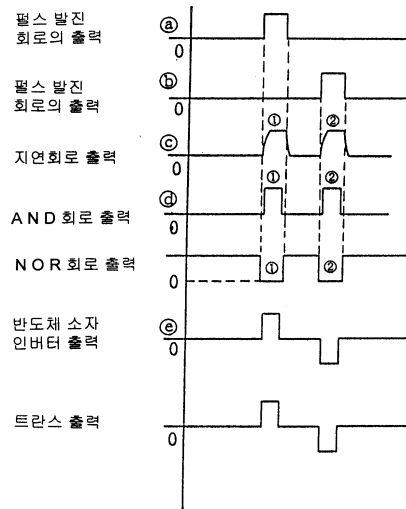


5

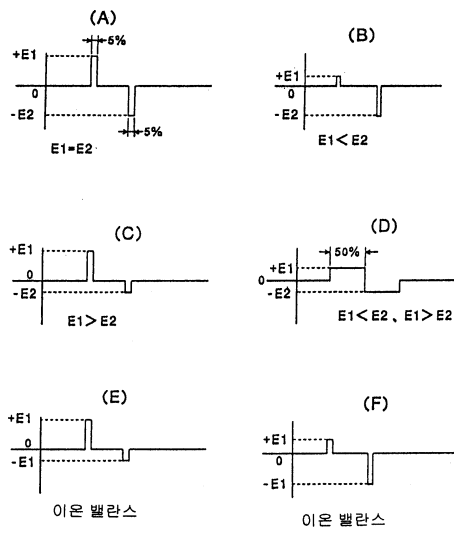




7



8



9

