



:

(54)

(ADC) 가 , ADC  
 가 , ADC /  
 /  
 (hand - held)  
 PDA (personal digital assistant) (combin  
 ation) , 2 PDA  
 , LCD (liquid crystal display) 가 가  
 가 (flex circuit) , 가  
 ( , ) , 16 4 x 4 PDA 8  
 (hinge) (routing)  
 가  
 PDA , (touch panel display) , 2 가  
 PDA 가 ADC 가 LCD  
 PDA PDA

PDA  
1  
가 , PDA  
(SMARTPHONE)  
(KEYPAD) 가

2 ,  
(single contact) 가 (multiple contacts)  
(SPEAKERPHONE) 가 . 3

3  
(ADC) 가 , ADC  
가 , ADC  
/ 가

가 /  
가

가 /  
가

1 가

2 가

3

4

5

6

7

가

PDA

가

가

1

PDA

PDA

2

3

1

가

(100)

(100)

(102)

(112)

(102) LCD (104),

(106),

(108),

(110)

(112)

(114),

(116),

(208) ( 2 )

(114)

(114)

(112)

(112) 가

가

(114)

(112)

(100)

(102)

(112)

(116)

(118)

(118)

(112) 가

, LCD

(104)

. LCD

(104)

(signal strength indicator)

가

(110)

(108)

(106)

(110)

(100)

(100)

2

가

(100)

(100)

(102) LCD (104)

. LCD (104)

가 PDA

, LCD (104)

Palm™ organizer

(100)

(102) PDA

(202), 1

(204),

2

(206)

. PDA (202)

( 6 7 )

가

(112) 가

(108)

(112)

(112) , 1 (208) 1 (210) 2 (212) (112) 가  
 (210) 1 (204) , 2 (212)  
 2 (206) , (118) ( 7  
 )

PDA

(112) PDA (100)  
 (100) (300) (100) (112) (102) (300)  
 (302), (304), (pull - up) R (302)  
 (306) (302) (304) (304) R  
 V , (304) (302) V +3.  
 3 volt , R 100 kΩ ,  
 , V R

(112) (208) (308) (112) 가  
 (308) (302) (302) (engage). (112) 가  
 (308) (302) 가 (low) (310) (310)  
 ge). (112) 가 , (308) (302) (302) 가 (disenga  
 R V (310) (308) (304) (high)  
 가 (100) (310) 가 ( ) , (304) (100)  
 (304) 가 (100) (310) 가 ( ) ,  
 (304)

4 (112) (100)  
 (100) (102) (100)  
 112) (208) (112) 가 (114)  
 , (112) (100) (102) ,  
 . 3 (402, 404, 406) 3 (208) 3  
 , (112) (100) (102)

4 (112)  
 (112) 3 (402, 404, 406) ( ) , 3 ( )  
 610, 612, 614) ( 6 ) (408) ( ) (100)

(102) (616) ( 6 ) (100) (102)  
 , PDA ,  
 (112) 가 (402 610) (408  
 616) (112) 가 (406  
 404 612) (408 616) (406  
 614) (408 616)  
 (112) 가 (112) 가 가  
 (against the side of one's face), (being in the handgeld config  
 uration), (on the stand) (100) 가 5  
 (112) (100)

6 (112) (402 - 408) (610 - 616) 가  
 가 (600) (112) (100) (102)  
 (112) (100) (102) (408, 616)  
 (112) (402, 404, 406, 610) (100) (102)

(112) (118) (610 - 614) R13 (118)  
 (402) R14 (118) R13 (406)  
 R14 (404) (610, 612, 614)

(118) (118) (604)  
 (602) (602) (604) (602)  
 (602) 가 (602) (604) 가 (602)  
 (602) (602)

(610 402) (100) (102) (112)  
 (100) (602) (602)  
 (604) , K1 R1 , K2 R2, K3 R3

(612 404) (100) (102) (112)  
 (100) (602) (602) R14  
 (604) , K1 R14 R1 , K2  
 R14 R2, K3 R14 R3 R14  
 (118) (602) 가 R14  
 (602) 가 R14 (606) (100) (10  
 2) ) (118) (100) 가  
 (118)

(614 406) (100) (102) (112)  
 (100) (100) 가 (118)  
 R13  
 R1 R12 (118) (602)  
 (100) 가 (602) 가 (100) 가  
 R13 R14

(100) (102) (616 408), - (ADC) (606),  
 (608), PNP (620), 2 R15 R16 (408)  
 (616) ADC (606) R15 (616) (112)  
 ADC (606) ADC (606) (608) ADC (606) (608) PWR  
 R16 PNP (620) PWR (608) 가  
 (118) (turn - on) (turn - off) 가 PNP (620)  
 VS VS +3.3 volt , PNP  
 (620) R15  
 , R14 (100) (102)

(608) PWR  
 R16 PNP (620) PNP (620)  
 PNP 가 가 VS PNP (620) (118)  
 R15 ADC (606) (112)  
 가 가 (100) (102)  
 가 ADC (606) (608) (608)  
 (112) 가 (100) (102) , ADC (606) VS PNP (6  
 20) R15  
 (608) (608)

7 , (100) (112) / (700)  
 (112) (100) (102) (112) 가  
 1 (210) 1 (204) (100) (102)  
 (206) , 2 (212) 2  
 (708)

(112) (118) 1 (210) R13 , (1  
 18) 2 (212) R13 (118) (118)  
 (702) (702) (702) (704)  
 (702) 가 (702) (704) 가 (702)  
 2) 1 2 (204) 206, (702) (100) (10  
 (708), PNP (720), 2 R14 R15 (ADC) (706),  
 (206) 1 1 (204) ADC (706) 2 R15  
 1 (204) (112) ADC (706)  
 (708) 가 , ADC (706)

PWR (118) R14 PNP (720) PWR (708) 가 (118) PNP 가 PNP (720) VS VS +3.3 volt (720) R15

R14 (720) 가 PNP (708) (720) PWR PNP (720) PNP (720) (118) VS (720) R15 ADC (706) (112) 가 (702) (210) R13 (702) (112) 가 (708) 가 가 (702) 가 R13 (704) 가 K1 R13 R1, K2 R13 R2, K3 R13 R3

R1 R12 (118) (702) (112) R13 (702) (100) (102) (708) (VEC) R15 ADC (706) VS (VR15) (708) PNP (720) (112) /

가 PDA 가 가

(57)

1. / , 가 1 ;
- 2 가 , 1 가 , 1 / ;
- 1 2 ;
- 1 , 2
- 1 2
- 1 2

2.

1 ,

3.

1 ,

4.

1 ,

1

5.

4 ,

6.

1 ,

2

1

7.

6 ,

8.

1 ,

2

9.

1 ,

1 , 2 , 1 , 1  
10.

1 ,  
1 2 , 1 , 1  
11.

1 ,  
1 , 2 PDA .  
12.

11 ,  
13.

12 ,  
14.

13 ,  
1 , , .  
15.

13 ,  
1 , .  
16.

/ ,  
2 가 1 가 2 ; , 1  
1 , 1 / 1 2  
 , ;

1 / 가 1 2

17.

16 ,

1

2

18.

16 ,

19.

16 ,

1

20.

19 ,

21.

16 ,

2

22.

16 ,

1

1

1

2

23.

16 ,

1 1 , 1  
2 .

24.

16 ,

1 , 2 PDA .

25.

24 ,

26.

25 ,

27.

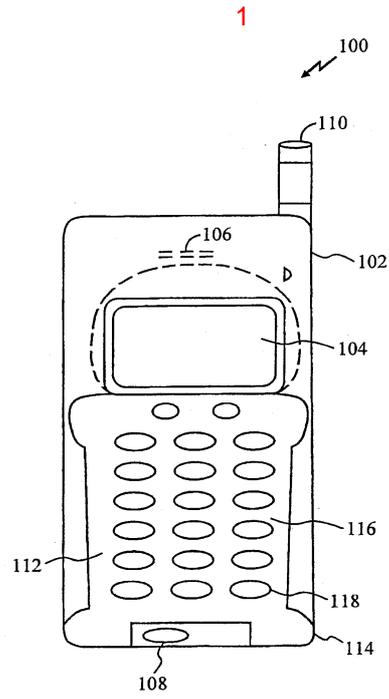
26 ,

1 , .

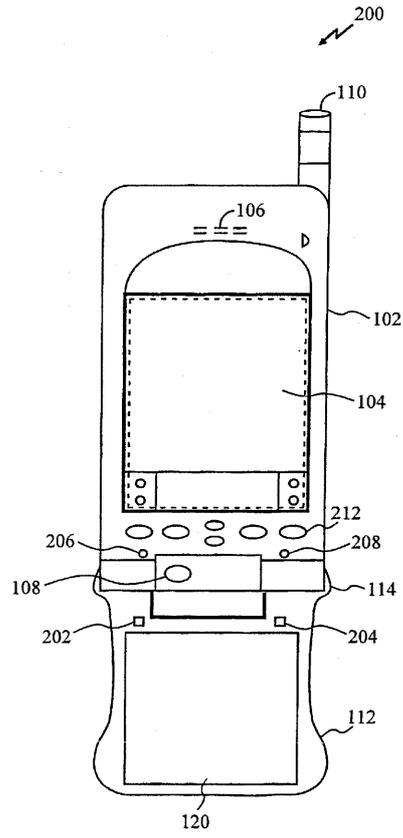
28.

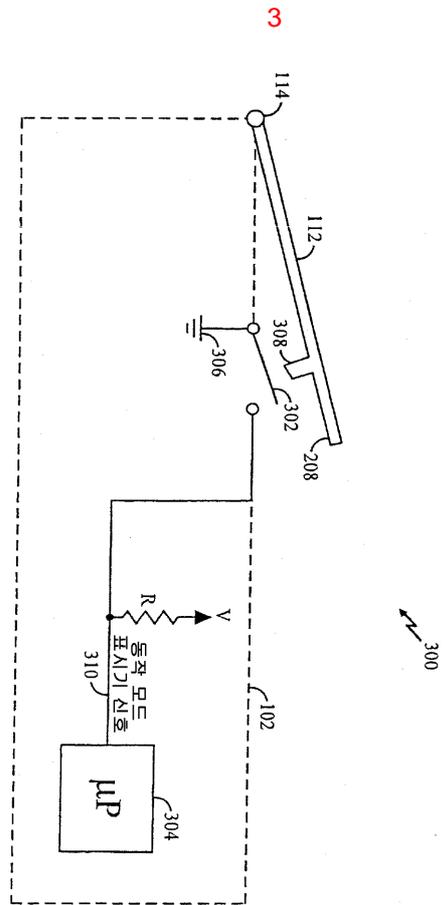
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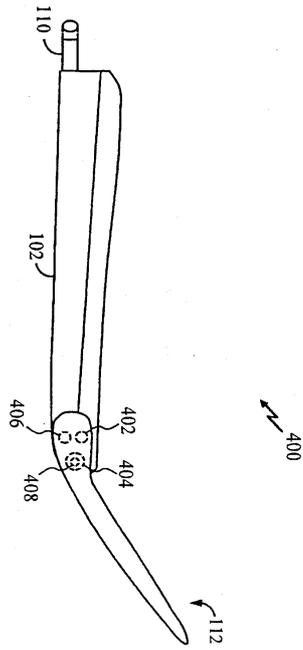


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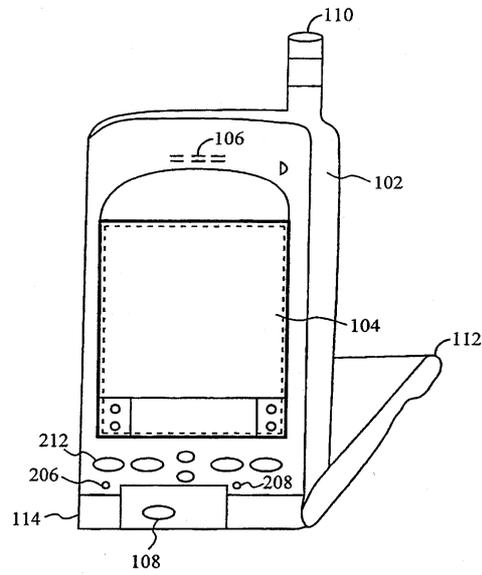




4



5



6

