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(73) 가 가 가 4 - 6

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가 가 643

가 4 - 14 - 6

가 1 - 47 - 1 D401

1 - 61 - 13

1489 - 1 A203

가 가 3514 434

(74)
:

(54)

가 1/2 가 , 가 , 1/4 가 , 가 ,

도 1

1	1	,
2	2	,
3	2	,
4	2	,
5	2	,
6	2	,
7	3	,
8	5	,
9	3	,
10	4	,
11	5	,
12	1	,
13	2	,
14	1	,
15	2	,
16	2	,

17		2
	,	
18		2
	,	
19	1 4	,
20	1 3	,
21		3
	,	
22		3
	,	
23		3
	,	
24		3
	,	
25		3
	,	
26		3
	,	
27		.

Personal Handyphone System(PHS)

가 F 5 - 327331 6 - 177629 가

가 가 가 가

TEM(Transverge Electromagnetic)

가 (5 - 14047).
 27 . 27(A) , 27(B) 27(A) B-B .
 (51) 가 (53) ,
 (57) (51) (54) (34(B)).
 (51) () (53) (52)가 ,
 (53) (51) (53) ()
 (55)가 . , (51) (56)

(51) (53) TEM . , (55)
 (51) () (53) , (52)
 3) . , (52) (51) () (5
 (55) .

(53) (57) (51)
 , 1/2 ,
 (51) () (53)) 2 가 TEM (51)
 () (53) (57) 0 , (53)
 . 가 1/2
 1/2 80mm 가 , PHS 1. 9GHz
 80mm 가 . , 34
 1/2
 가 .

1/4

) 가 ()
 ()) ()

2
2 3 , 1 2 1 ,
가 ,
1 2 가 , 3 가
가 , 가 , 가
가 , TEM 가
가 , 1/4
가
() 가
1/2 1/4 , 1/2 1/4
TEM 가 1/2 가
()가
() 가
1/2 1/4 1/8 1/2 1/4 가
가
가 ,
1 1(A) , 1(B) 1(A)
A - A , 1(C) 1(A) B - B
1 , (1) , (1d) (1) , (1e) (1)
(1b) , (2-1) (1) (1a) , (3) (1) (1a) (1)
b) , (3a), (3b) (3) , (3c) (3) (3)

(1) (1b) (1) (1) (3) (5) (3c) (7)

(1), (2-1), (3) 1(A) A - A (1(B))
 B - B (1(C)) (1)

(3b)가 (1d) (3) (3) (1) (4) (3) (3a),
 (3) (3a) (3c) 1/4 (2-1) (3)
 z (1) (1) TEM 1.9GH
 (1/4) (40mm)

(3) (3c) (1) (受電) (6)
 (7) (1e)

(1) (7) 가 (50) (7)
 (3) 가 (7) 가 (6) (3)

TEM (3) TEM

가 TEM (3)
 (1) (1) (3) (3) (1)
 가 (1) (1)

1/100 가 가
 1/75(2mm)

가 TEM (3) 가 (1) (3)
 가 (3) 가 (3) (3c) (2-1) (3)
 (2-1) (2-1) (2-1) (1) (3)
 (3) (3a) 가 (1(A) B - B) (1) (3a)
 (3) 0 (2-1) 가 (3a) (1d) (2-1)
 (2-1) (3) (2-1) 가 (2-1) (2)

(1) (1) (2-1)
 (2-1)

가 . , 가

(3) (1)

(4) , 가 (3) (3)

(1) 가 . 2

2 2 6

2 가 □ (2-2) . 2 가 □ (2-2)
3 (3c) (3) (2-2) (3)

(1) 1/4 1/8 (1/2 40mm 20mm)
가

3 2 □ (2-2) (3) 가
(2-3) (2-3)

4 3 (2-3) (2-4)
4 (1)

5, 6 (2-5), (2-6) 가 " " , 5 (3)
5, 6 , 6 (2-6) (3)
(1)

2 6 가 , 3 6 2
가

(3) (3)

4 (2-4) . 7 (2-4)
7(B) 가 7(A)
(2-4) a-b g-h, c-d e-f

(2-4) b-c f-g
, 7(B)
(2-4) A-B

(2-4) d-e
, (2-4) d-e

, 2 6
(3)

(3)

(/4 , (3) 1/75

1 8 3
(0 360)

8 180 1/4 , 1
8 8dB

가

, 9 (1)

3

9 2

(1)

(3')

(1)

(1a)

(3')

가

(1)

가 (3')
(3c')

(2-2)

(3')

(3c')
(3')

(2-2)가

(3')
가

(3c')

(7)

가

, 4 10 (3) (3b) (1d)
A , 10(C) 10(A) B-B 10(A) 4 , 10(B) 10(A) A-
, (6') (5') 11 , (5') (1) (1d)
(3c) (3) (3b) (3) (3c) (1e) (1) 1 (3)
(1e) (3) (5') 가 (1e) (1d)
(3) 1/4

(1)

1

(4')

(1)

(4')
(4')

1

가

(3)

가

(1)

2 - 1) (2 - 1) 가 (2 - 1) (1) (1)

(4') 가 (1) Q (1)

(1) (3) 11(A) A - A (7) 5 11(C) 11(A) B - B (4b) 11(A) 5 (5), (5'), (6), (6'), (4b) (3) 4 (2 - 1) (1) (4a) 가 (2 - 1)

(4b) (1) Q 가 (4b)

(3) (1) (4a) (4b) 가 5 4

(4a), (4b) (4a) (1a)가 12 (2) 가 (2 - 2) (1) (12(A)) (3) (4b) (5) (3) (12(B)). (1a) (1b) (1d), (1c) (1d), (1c) 2 (12(C)). (1) (4a), (4b) 가

(8) 2 (8) 13(A) 2 (8) 13 (1b)가 13(A) (2) (1a) 가 가 (3) 가 (9) 가 (9) (1a) (1b) (9) (9) 1/100 (9)

(1a)가 2 (8) (1b)가 (1) , 2 (8)
 (1) , (9)가 (1) (1c), (1d)

, (3) (1b)

, (3)

, 3 2

가

, 2 (8) 가

가 (3)

TEM 가

14 1 14

14(A) 14(B) 14(A) B-B
 (7b)가 14 (7a) (2-1) (2-
 1) (9)가 3 (10)
 2 (11) 3 (9) (3)
 (3) (3) (9) 2 1 (3)
 (3) 2 (2-1) 1 2 (4')

4 , 2 1
 (9) (12) (13) 4
 (9) (1b)가 (13) , 2
 (9) 1/200 가
 3
 1) 가 가 (2-1) (2-)

가

2 15 18

2

15(A) (14) 1 (28)

(15), 가 (16)
 , 2 (29) (17)
 (18) (19) (20) (21), LCD(22), (23),
 (24)가 (14) (19) (18) , (25)
 (26)

15(B) (15) (16a) (16
 b)가 , (16a) (17b)가
 (27) , (16b) (17b)가
 (27) . (16a) (16b) (17c) P
 LL (17c-1) , (17a) (17b)
 (17c) PLL (17c-2)가 . (17c) (17b)
 (17c-2) PLL (17c-1) (17c) PLL
 (17c) (27) 가
 5 10mm , 1 4mm , 1mm ,
 , ,
 가 .

16 , 16(A)
 (26), (25) , 16(B)
 . (14) 1 (28) (15) 2 (29) (30)
 16a), (16b)가 (14) 1 (28) (15) (15) ()
 . (15) 1 (28) (2-4)가 , (30)
 , 가 2 (29) 2 (29)
 (15) 가 , (15)
 가 2 (29) , (15)가 (14)
 , 가 ,
 가 가 .

17 (14) (14) 4
 . 1 (28) (15) (16) , 2 (29)
 (17) (17c)가 . 2 (29) (31) , (31) 1 ()
 (28) (32)가 . (33)
 31) . (34) (35) ,
 (36) (37) (32)
 (38) . 15 (14)
 (17c) 가 , (17c)가 (14)
 (31) (15) , (17c)
 (36) (15) (14) (31)
 (14) (15) (34)
 (16)

가 .

18 가 2 (14) (14)
 1 (28) (15) (16) (39)가 . (14)
 (39) 가 , (16) (39)가 가 . 18
 , 17 가 (16) (15)
 , (39)가 RF 가
 가 .

2 ,

가 ,

3 19 26

가 ,

가 ,

가 . ,

가

가 ,

가

가 ,

가

가 ,
가

가 ,

가

가

가

, 가

가

가 .

가 ,

,

,

,

,

,

.

가

가 가 , ,
가
.

가 1/4 , 가 1/2
2, 3, 4
19 가 , 19
가 1, 2, 3 20

19 가 가
19 2 ,
1dB , ,

가

21 , 22 2
, (41a) (40)
, (41b) (40) , (42a), (42b), (42c)
, (43) , (44a), (44b) , (45) , (46a), (46b) , (
47) 가 ,

(41a) (42a) (43) 1 , (41b) (42b)
(44a) , (43) (44a) 1
, (44a) (42c)
(44b) 1 , (44b) (43)
, (44b) (47)

(44b) (45) (46a) (46b) (44a)
(47) (43) (41b) (47) , (41b)
(41a) (41b)가 (43) (47)

19 0.6dB 20 2 , 가
가 , 가
가 가

BCD , A가 B A, A D C DCBA

4.

3 ,
C

A 1/2 , B, C D

5.

1 2 ,

가 1/2

6.

1 2 ,

가

7.

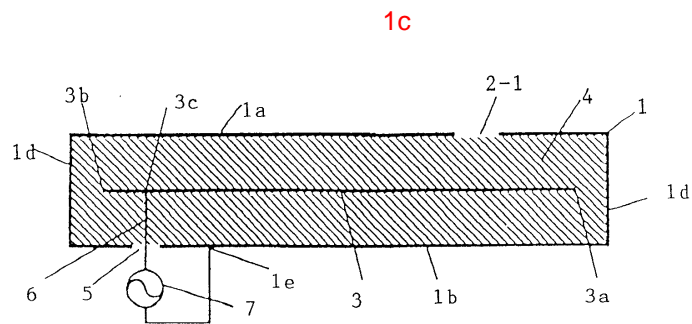
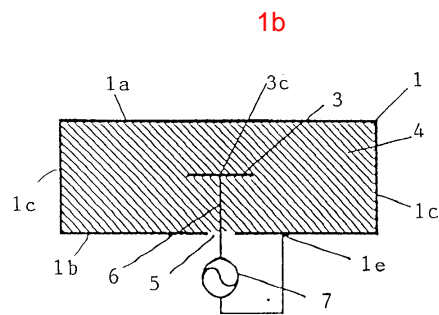
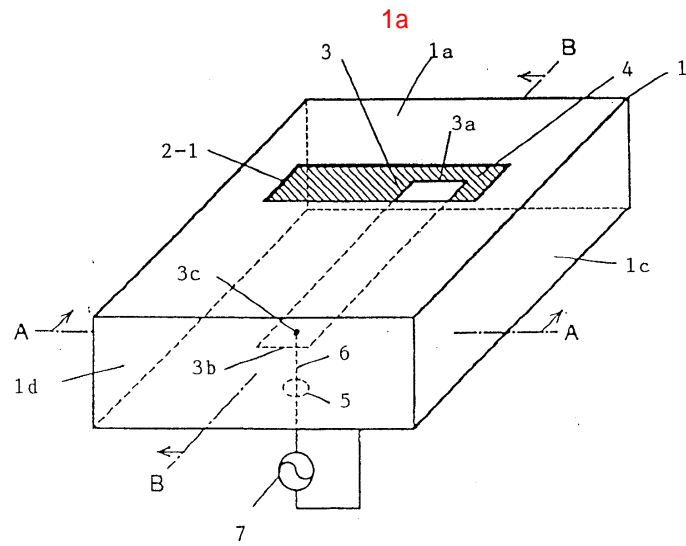
3 4 ,

가 1/2

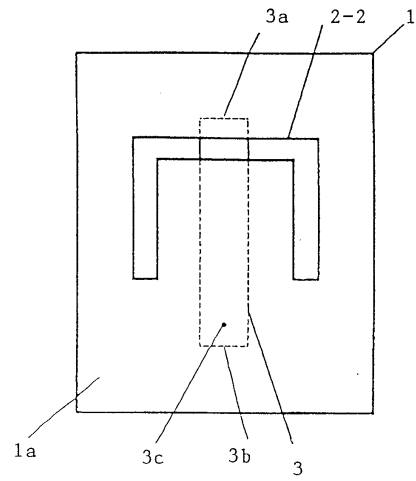
8.

3 4 ,

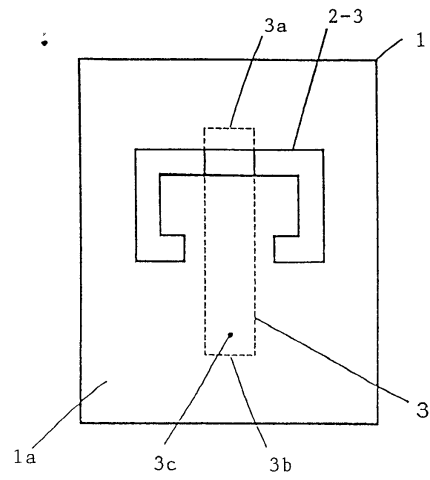
가



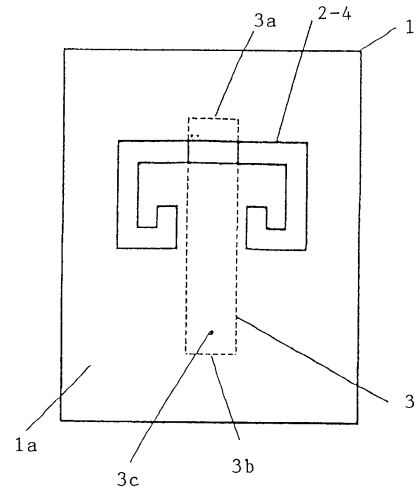
2



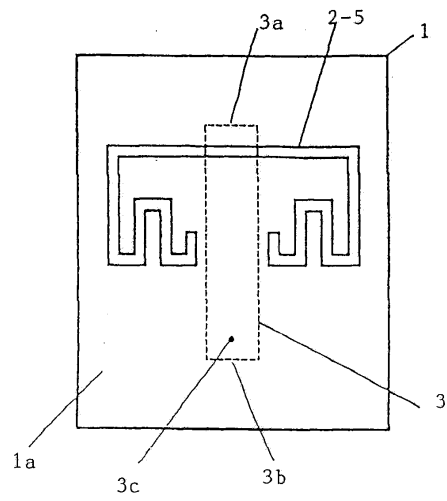
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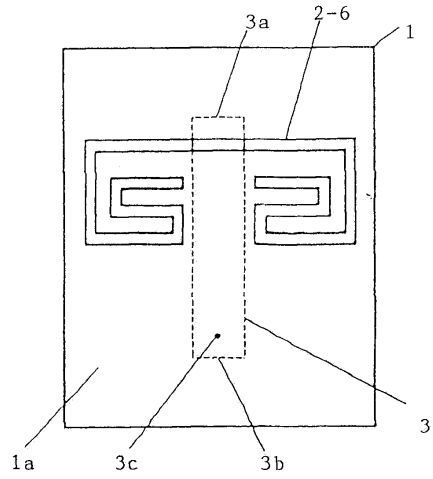
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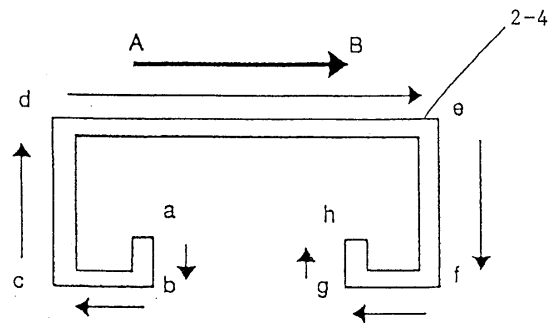
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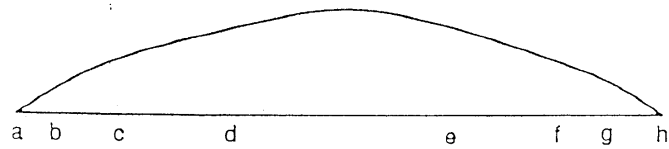
6



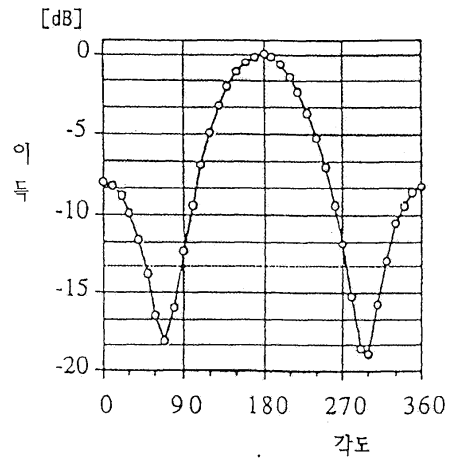
7a



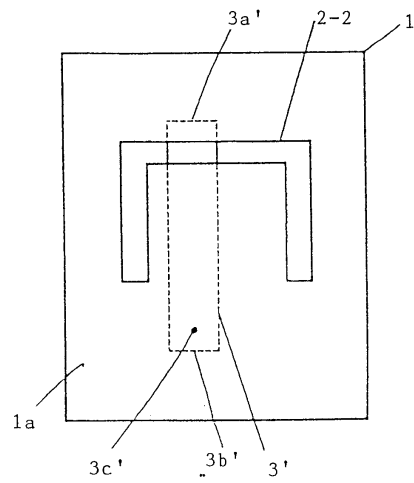
7b



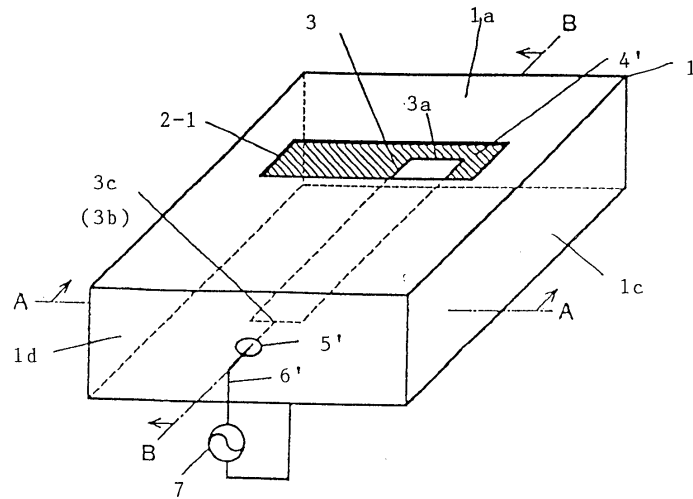
8



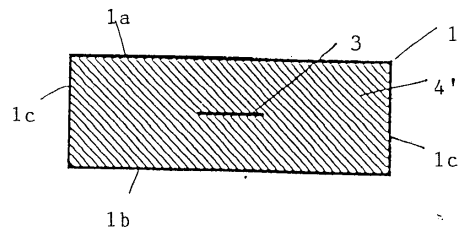
9



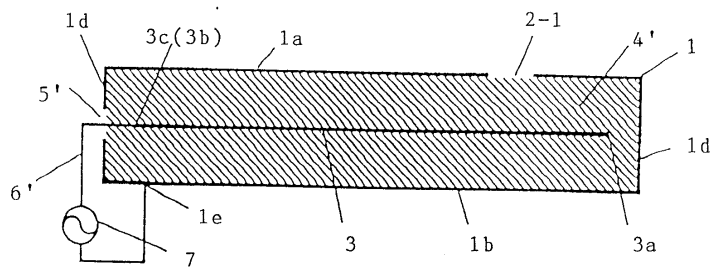
10a

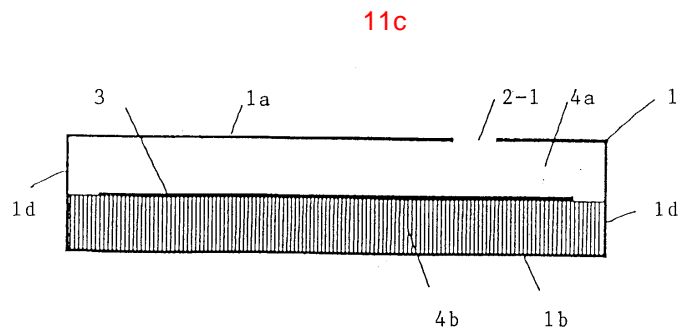
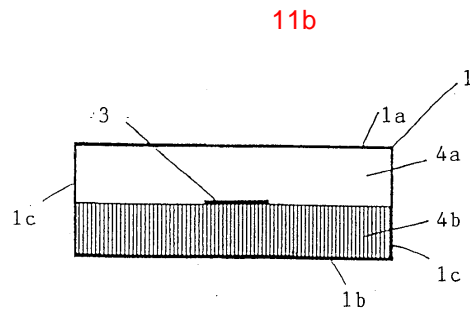
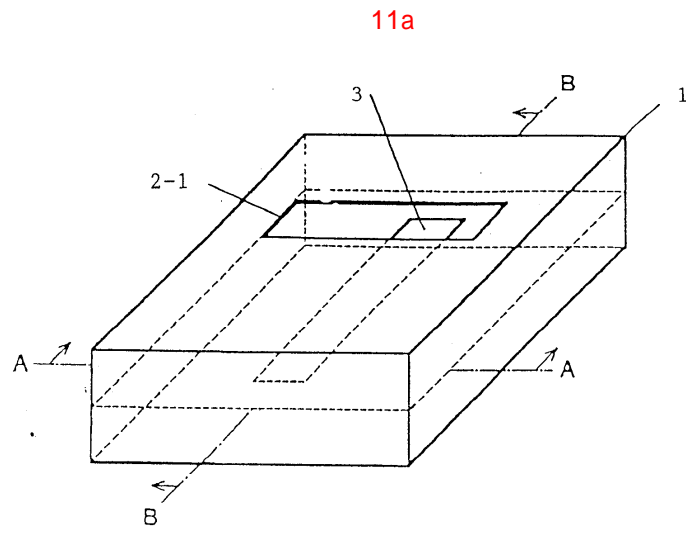


10b

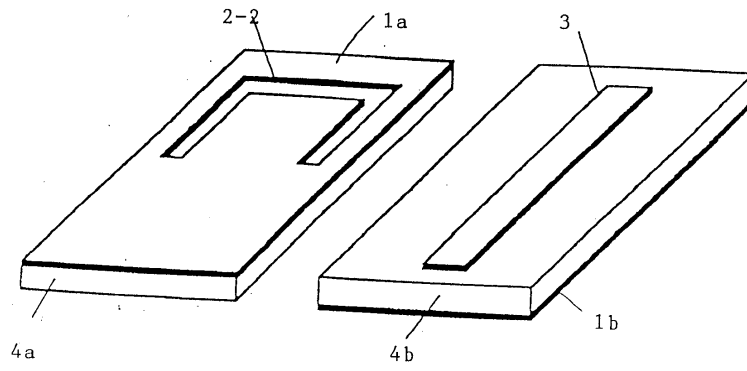


10c

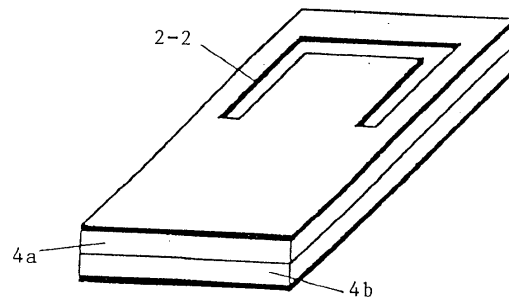




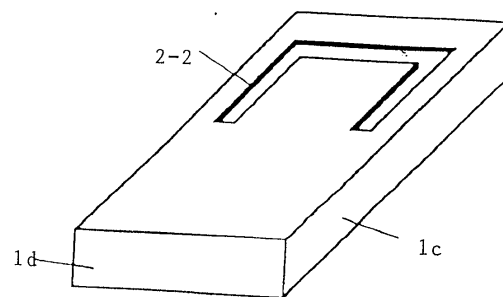
12a



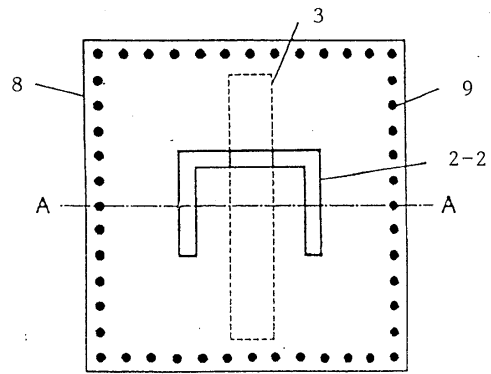
12b



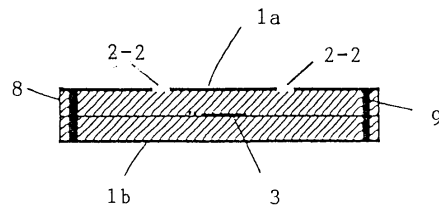
12c



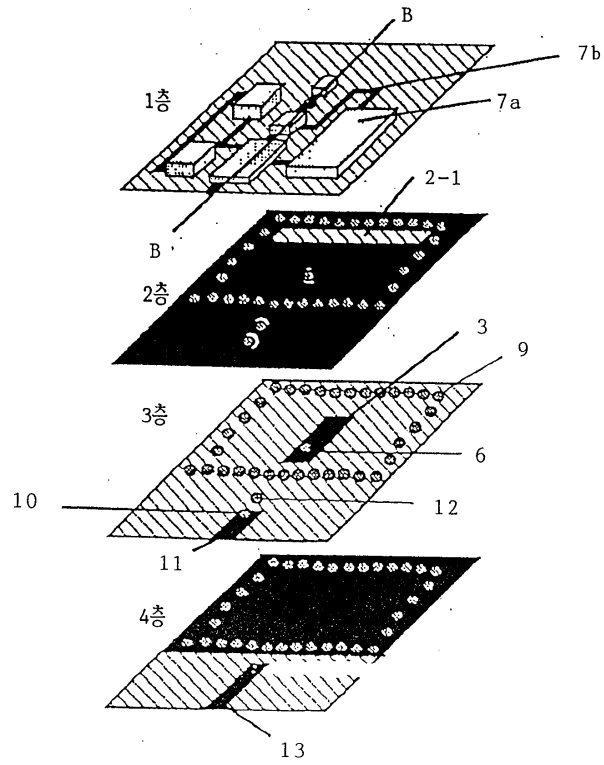
13a



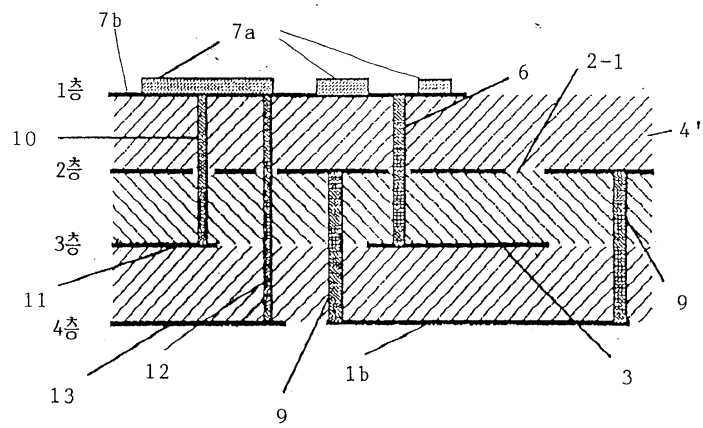
13b



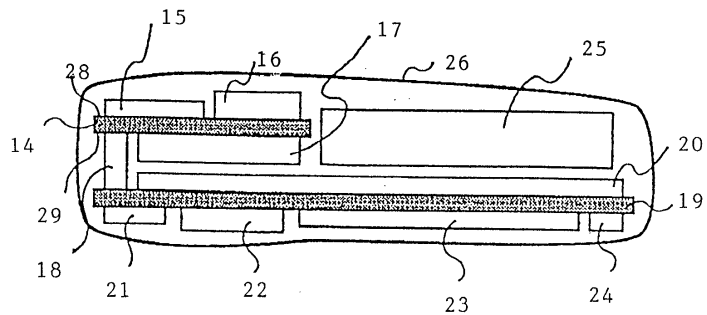
14a



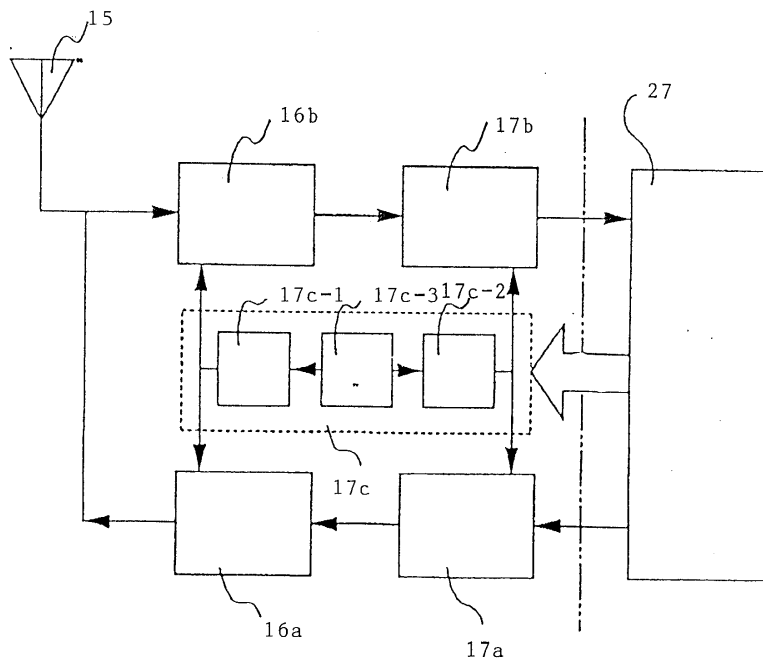
14b



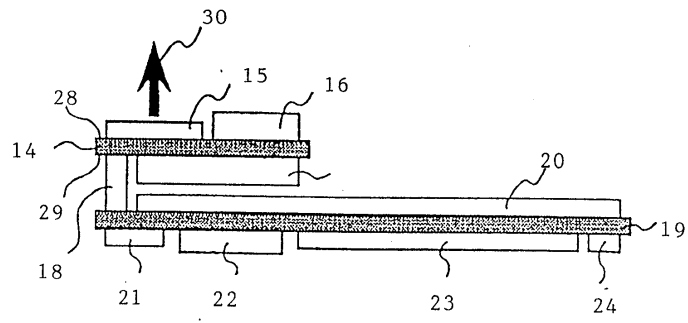
15a



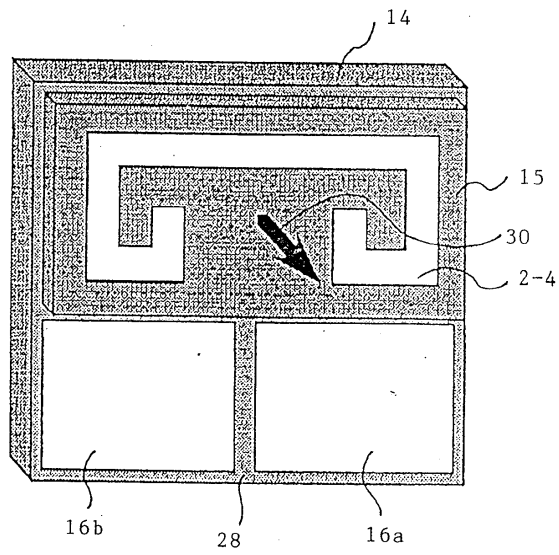
15b



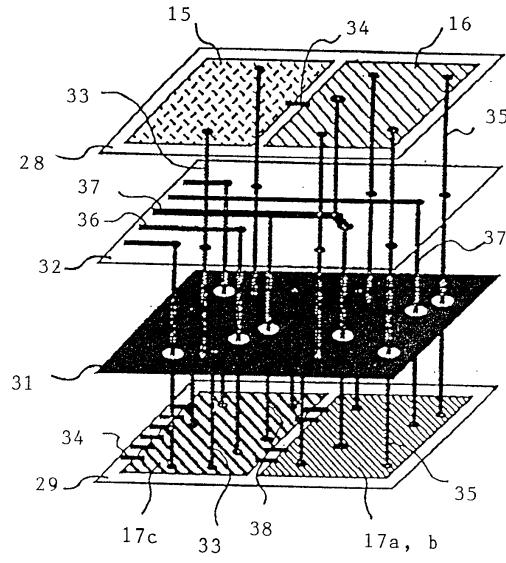
16a



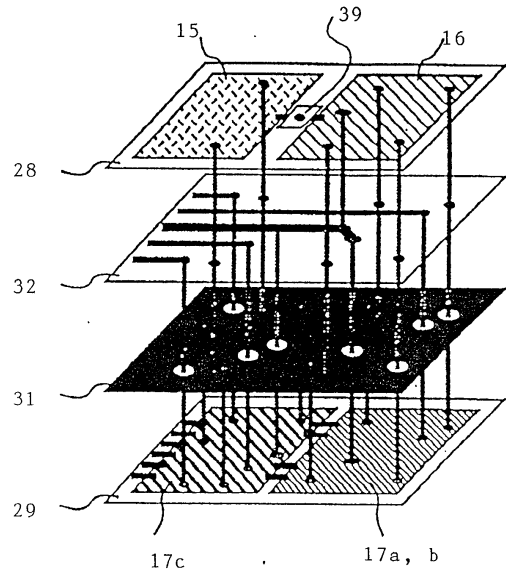
16b



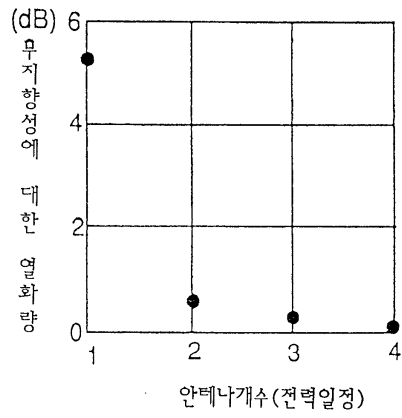
17



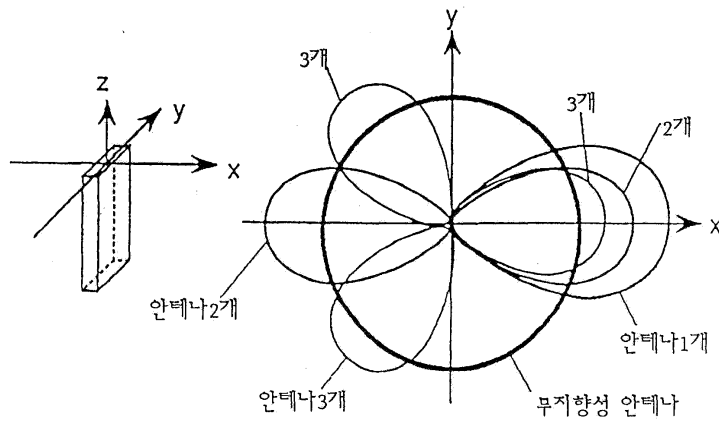
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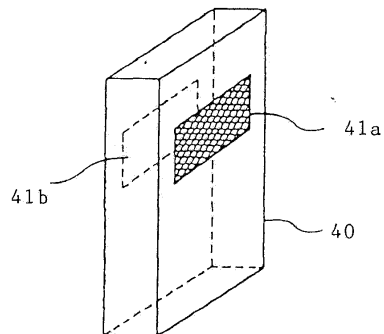
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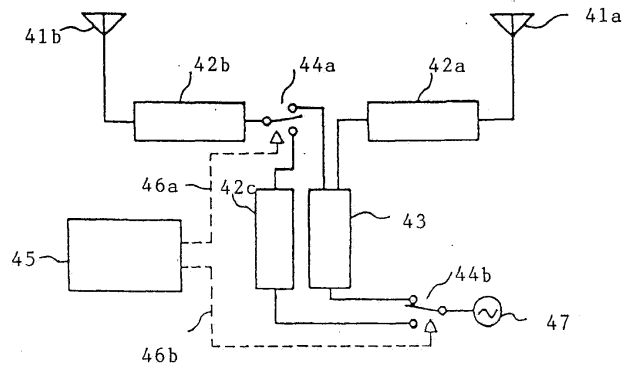
20



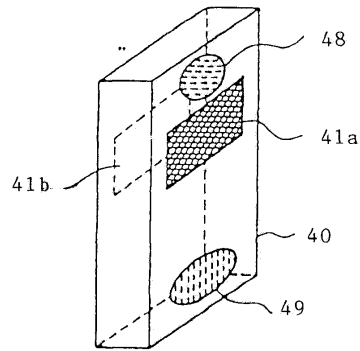
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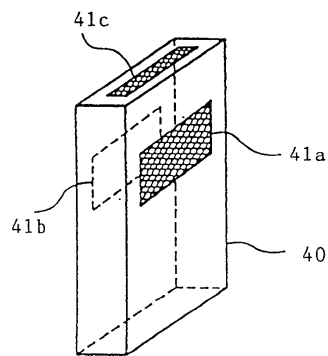
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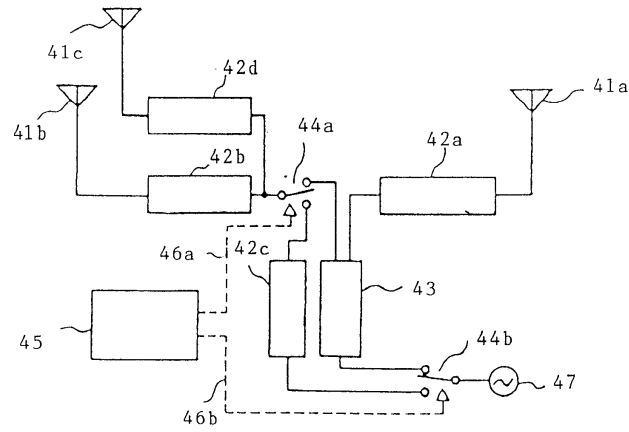
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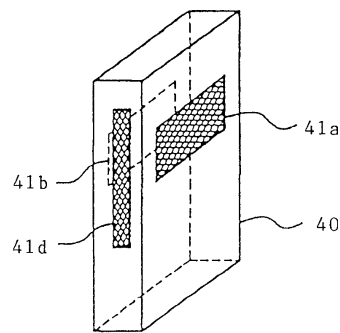
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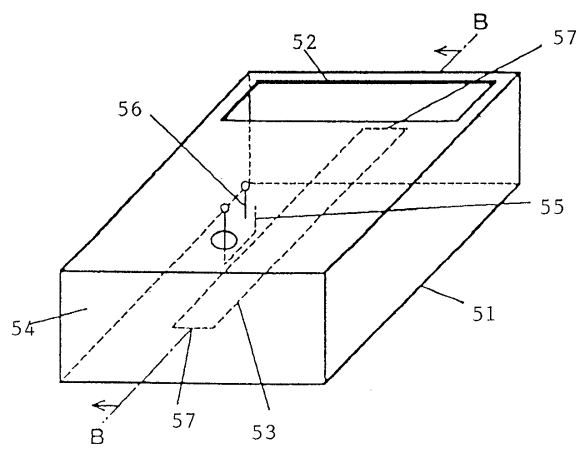
25



26



27a



27b

