

(74)

:

(54)

가 ,
 가 ,
 f0 가
 20%

3

, , , , f0

가 가 , , 5

0 - 39123

, 2 , ,

(wind noise)가 , 가 (量感)

, f0 20%
 1 2 1 1 , 2 2 ,
 1 1 2 1 2 1 2
 2 , 1 2 1 2 f0 1 20%
 f0 1 20%

1 2

f0 20%

가 , ,

가

, 1 , 1 1 , 2 2
 2 1 , 1 2 1 2 1 2 1
 가

2 80 .

가 .

가 ,

1/20 1/10

가 ,

1

2 1 II - II .

3 1 III - III .

4 3 .

5 3 .

6 .

7 6 VII - VII .

8 6 VIII - VIII .

9 7 .

10 7 .

11 7 .

12 .

13 12 XIII - XIII .

14 12 XIV - XIV .

15 14

16

17 16 XVII - XVII

18 16 XVIII - XVIII

19

20

21

22

23

24

25

26

27

28

(1)

1 3 , 1 3 1 III , 2 1 II - II , 1 , 3 1 III -

(30) (100) (10 20) (11) (11 21) (10) , (21) (20) , (30)

(11 21) (L) (L) ()
 , 10cm
 (L) 가 2 36mm , L 18mm (L)가
 가 (L)가 f0 (,)가

(42) 가 (41) (42) (44) 가
 (31) , (42)
 , 가
 (46) (14) ,
 (42) 가 3 (43) , 14 (4
 5) , (42) 3 (43) (43)
 , 14 (44) (45) (,
 (43)가) (44) (45)
 (42)
 (31) , (31)
 , (42)
 3) (44) (W₄) (W₄/W₃) × 100 (42) 가 (, (43) (45)) (W
 120% 180%, 150% .
 (42) 1 2 (42)
 , 가 , ,

(45) 1/10 , 1/20 1/10
 가 1/20 가 가 1/10 (,
 가) ,

f₀ f₀ , (11 21)
 20% , 30%

(4)

16 18 , 16
 , 17 16 XVII - XVII , 18 16
 XVIII - XVIII . 2 2 (42)가
 , 1 3

(400) (11) (10) (51)가 (50) (30)
 (10) (50) (51) 가 (L')
 , (30) (L') 2 (51)가 (,
 (51) 2 11 (51)가)
 , 18 9 11 (51)가) .

f₀ f₀ , (11)
 20% , 30%

(5)

(30) (11) (10) (51)가 (50)
 (51) 가)
 (51)

(1)

10cm 2 2 (124mm × 217mm × 115mm)
 18mm , , 1 3
) 40mm, 가 50mm가 가 18mm, 60mm, (가
 f0
 f0
 f0 62Hz , f0 90Hz
 f0 31%
 f0 36mm 54mm 가
 f0 78Hz(, 36mm f0 72Hz(20%) , 54mm
 f0 78Hz(13%) , ,

(2)

13cm 3 (150mm × 210mm × 150mm) 18mm
 , , 6 8
 0mm, 가 75mm가 가 18mm, 90mm, (가) 6
 f0
 f0
 f0 95Hz , f0 126Hz
 f0 25%

(3)

2 가 9 , f0 92Hz , f0 27% , 2

(4)

2 가 10 , 2
 . f0 84Hz , f0 33%
 .
 (5)

(, 3) 1
 . 1
 , (60Hz) , (,) .
 19
 , (,) (, 40mm 20mm) .
 20 21

22
 19 22 가 , () ,
 ((節)) 가 ,
 가 ,

(6)
 1 60Hz 10 (2V 6V) ,
 . 22 2V 23 , 6V 24
 .
 23 24 , 2V 가 , 6V
 1 가 가 , 1 ,

(7)
 0 , 2 f
 f0 , f0 1 f0
 1

f0
f0 57Hz
f0 90Hz
f0 37%

(2)

MDF 9 가
8
9 2 8 1
9
가

(10)

15 8
64Hz
28 8 가 28
28 가 2 5kHz 가
(, 8)

(,)

가

가

(57)

1.

f0 20% f0

2.

1 1 , 2 2 , 1 2

2 1 2 , 1 1

f0 1 2 f0 20%

3.

2 , 1 2

4.

f0 20% f0

5.

4 ,

6.

1 5 , 가 가 ,

가 , ,

7.

1 6 ,

8.

1 6 ,

9.

, ,
, ,
가

10.

1 1 , 2 2 , 1 2
2 1 2 1 , 1
가

11.

9 10 , 가 .

12.

11 , 2 80 .

13.

9 12 , 가

14.

13 , 가 .

15.

14 , 가 .

16.

9 15 , 가 가 ,

17.

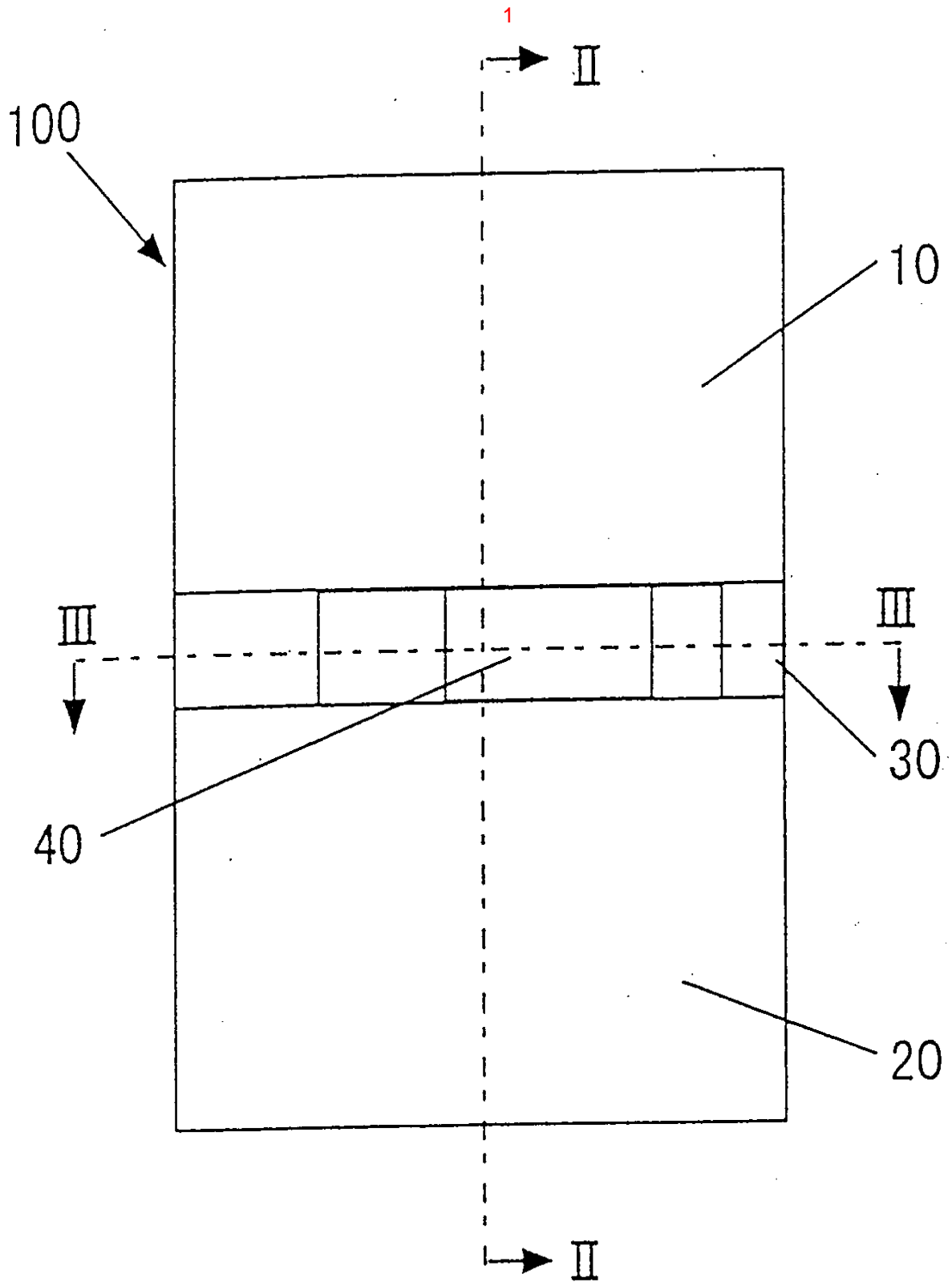
9 16 , 1/20
1/10 .

18.

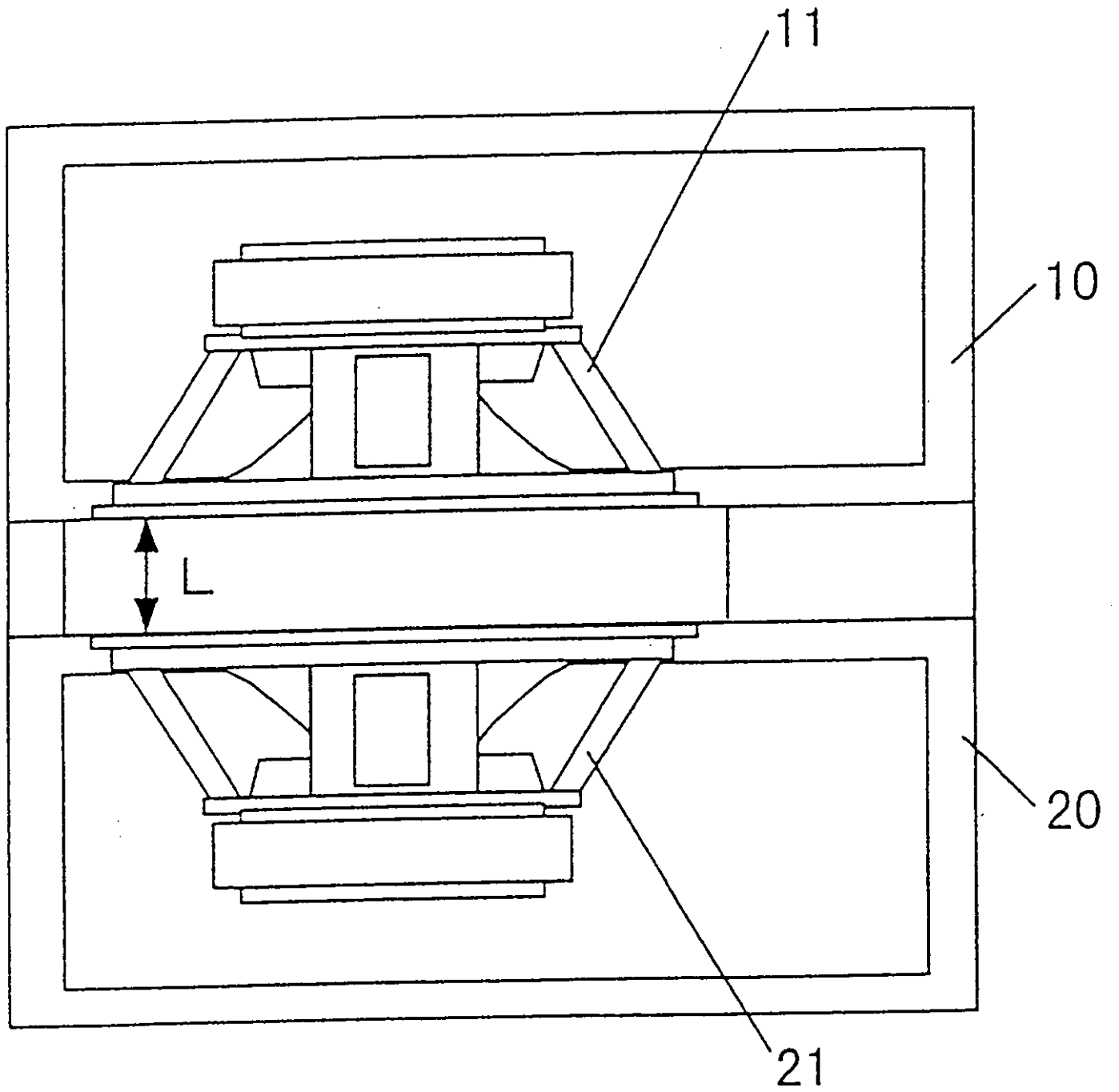
9 , .

19.

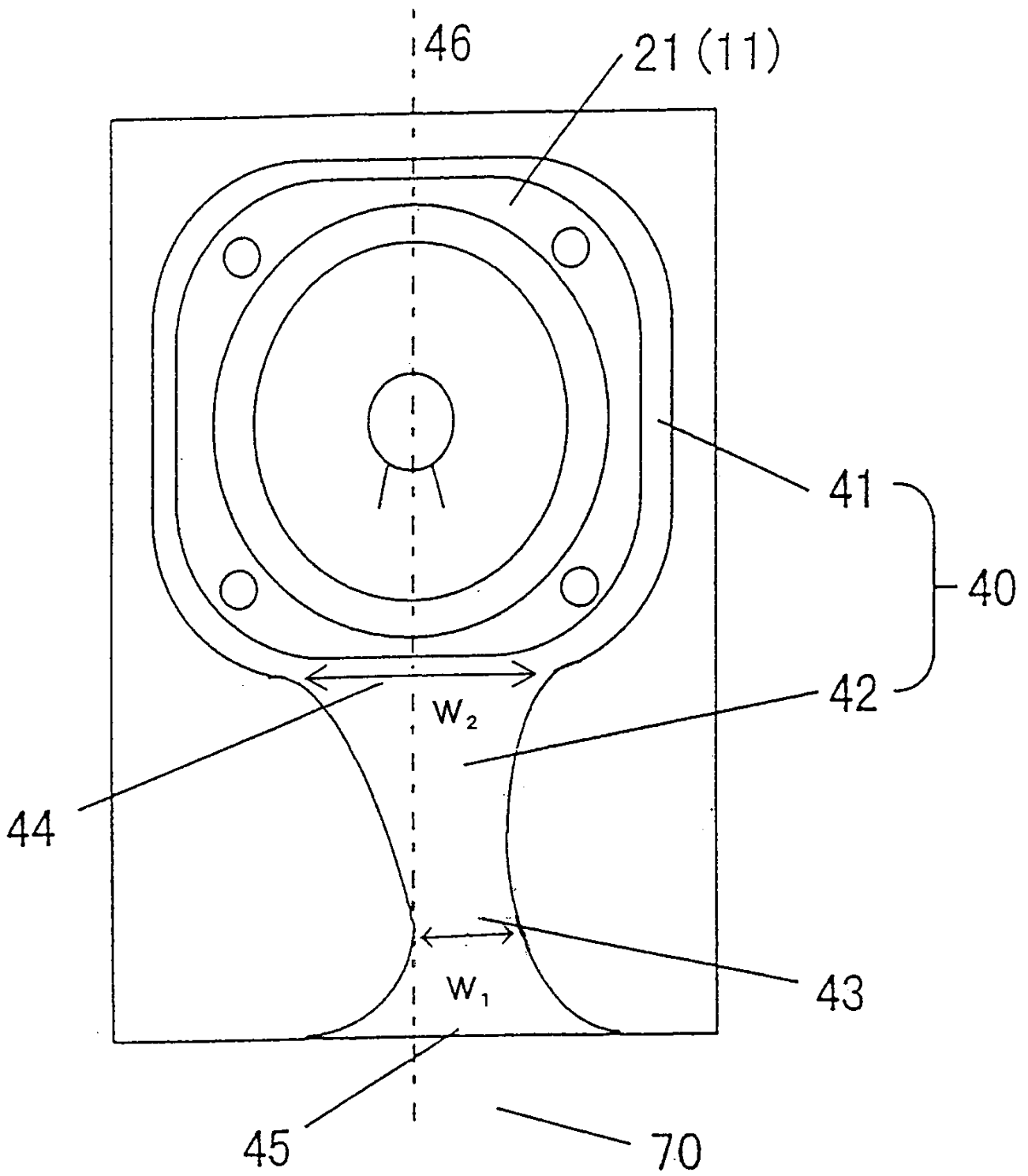
9 18 , 가 .
,



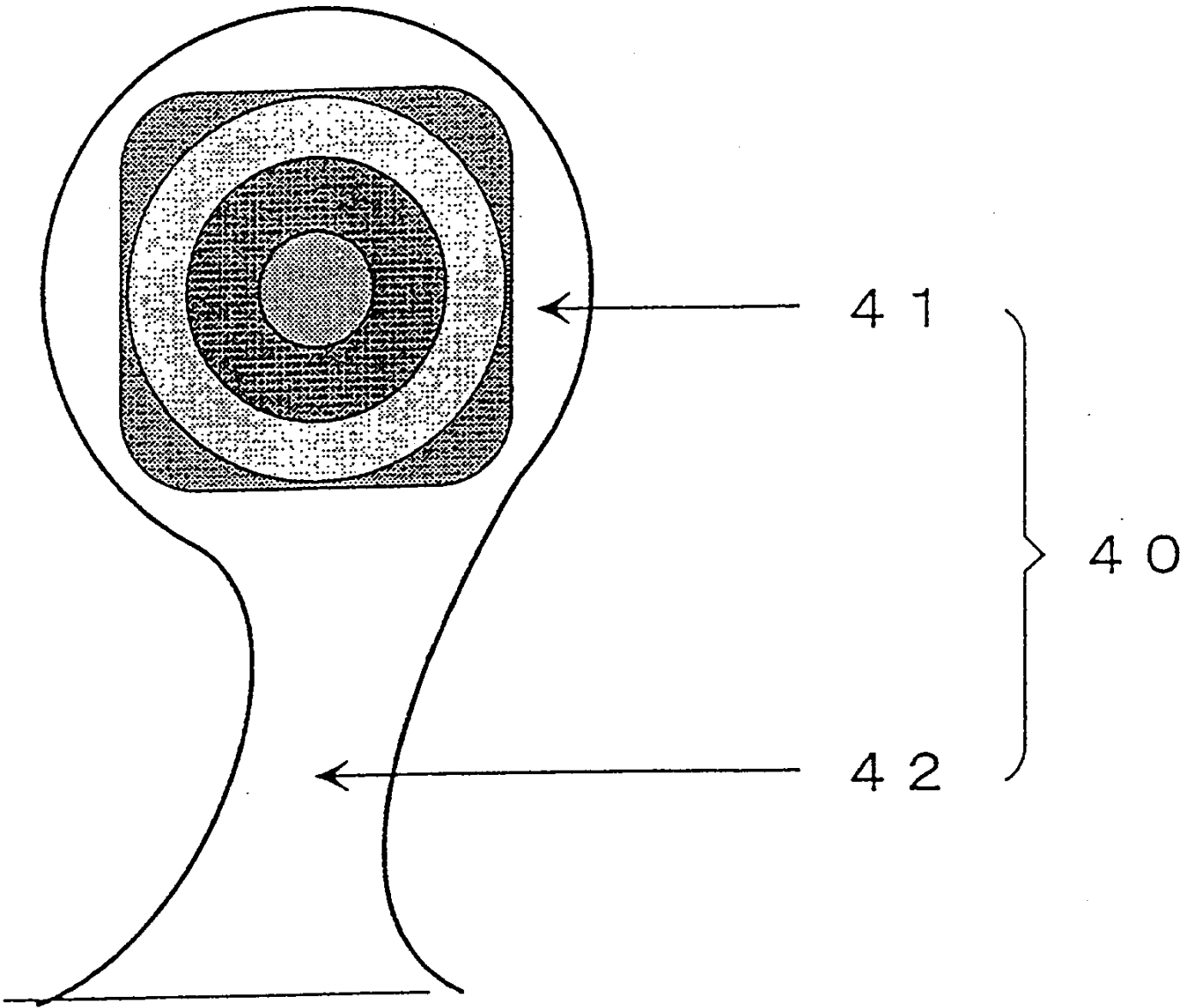
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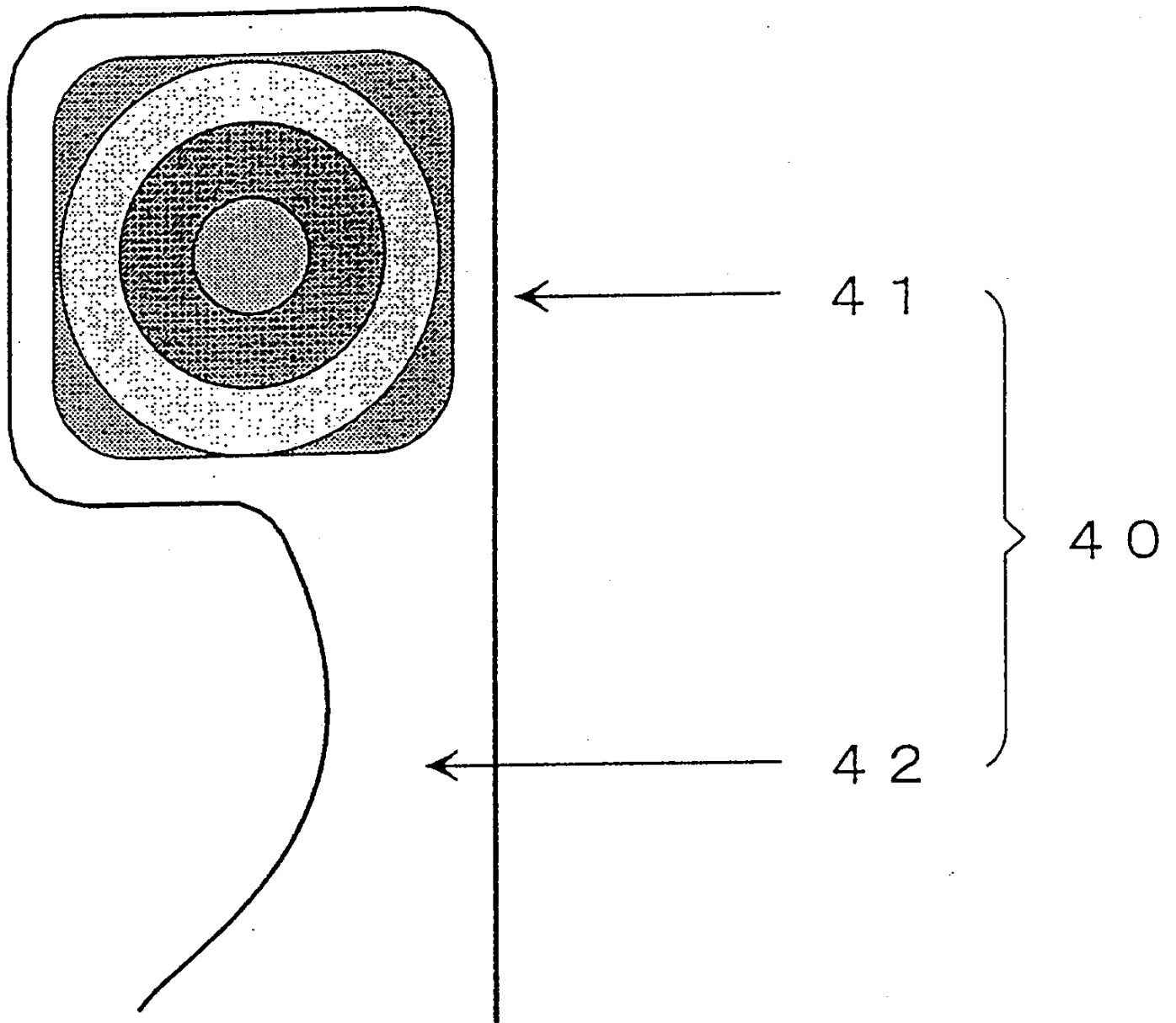
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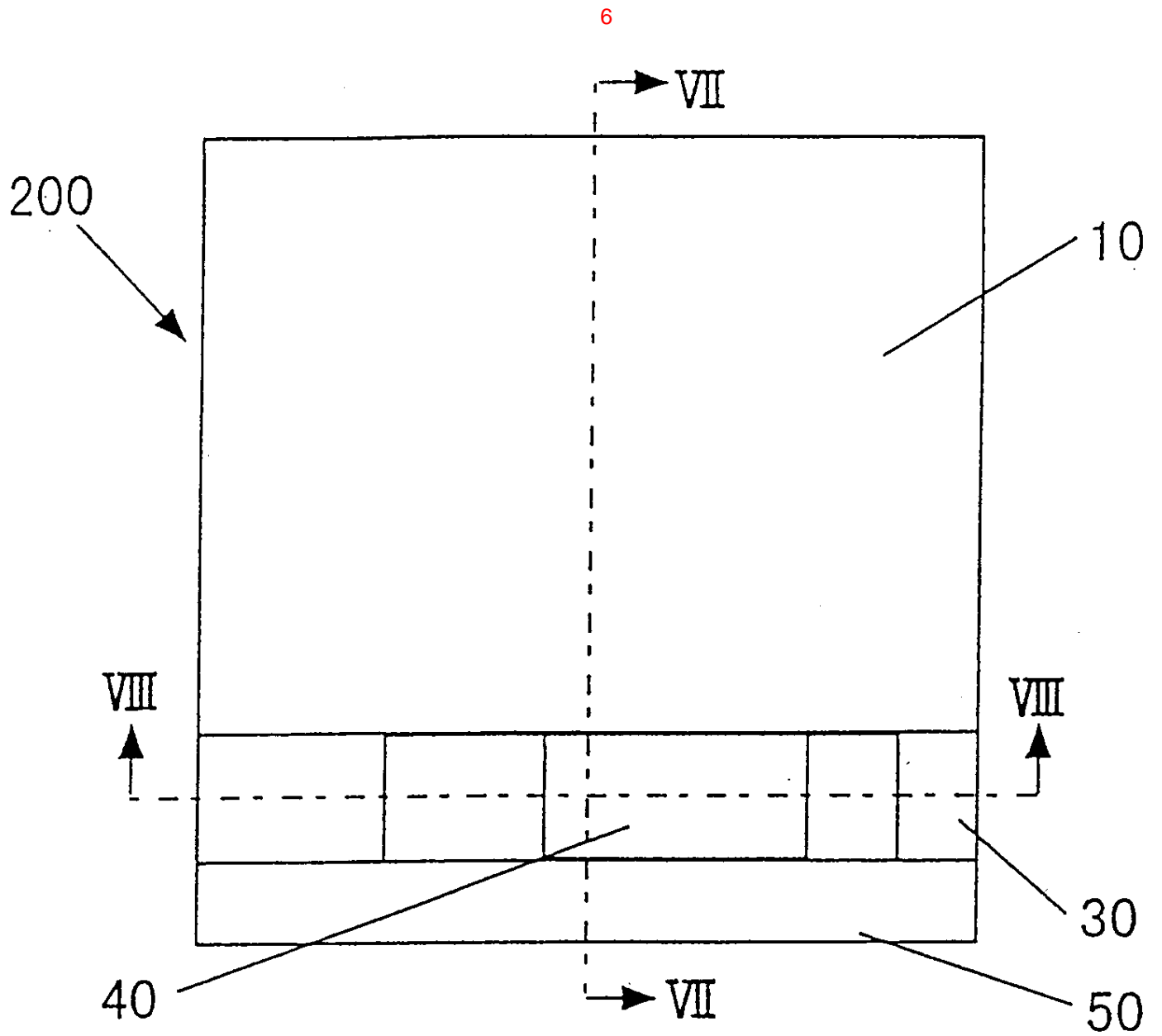


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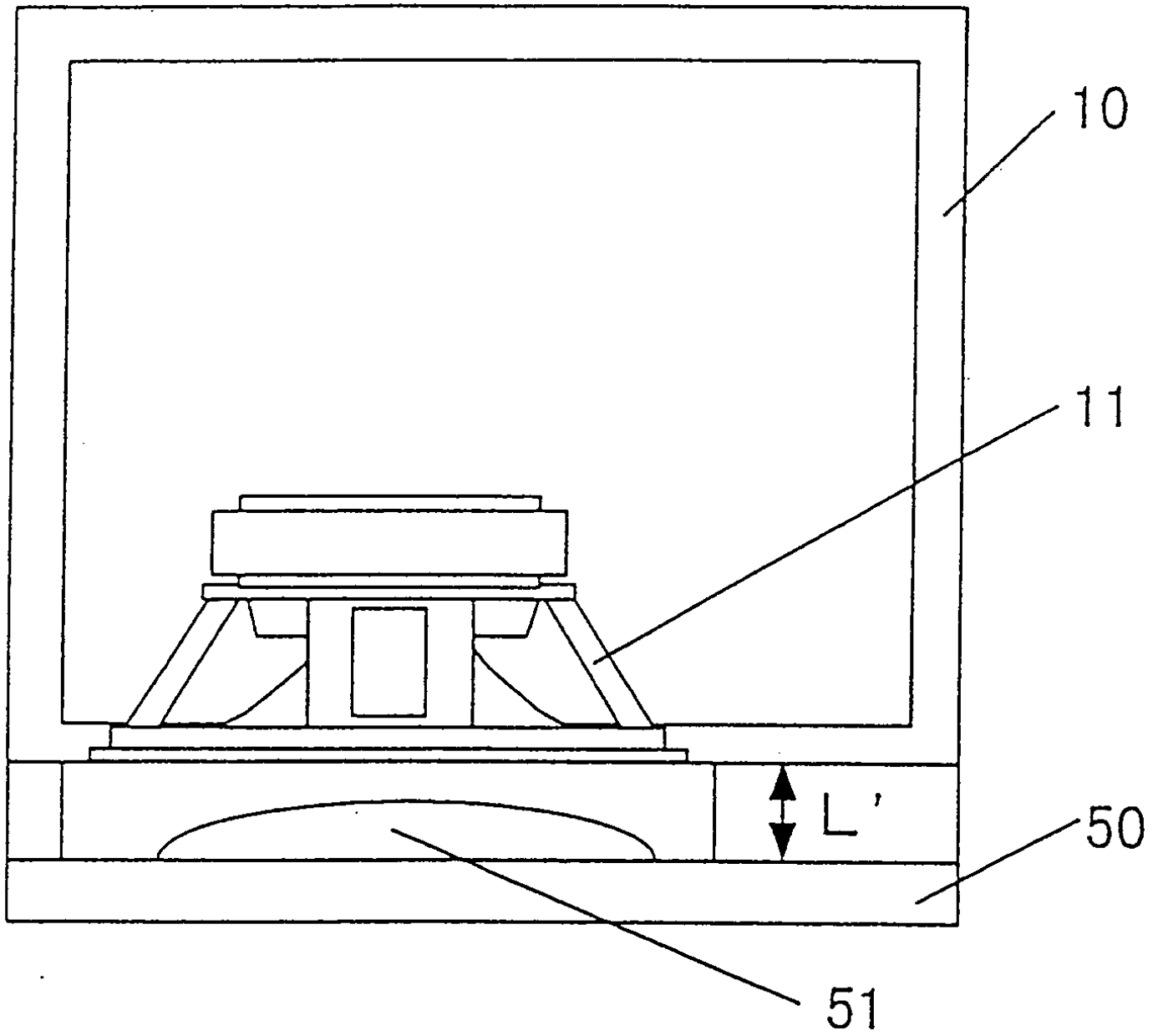


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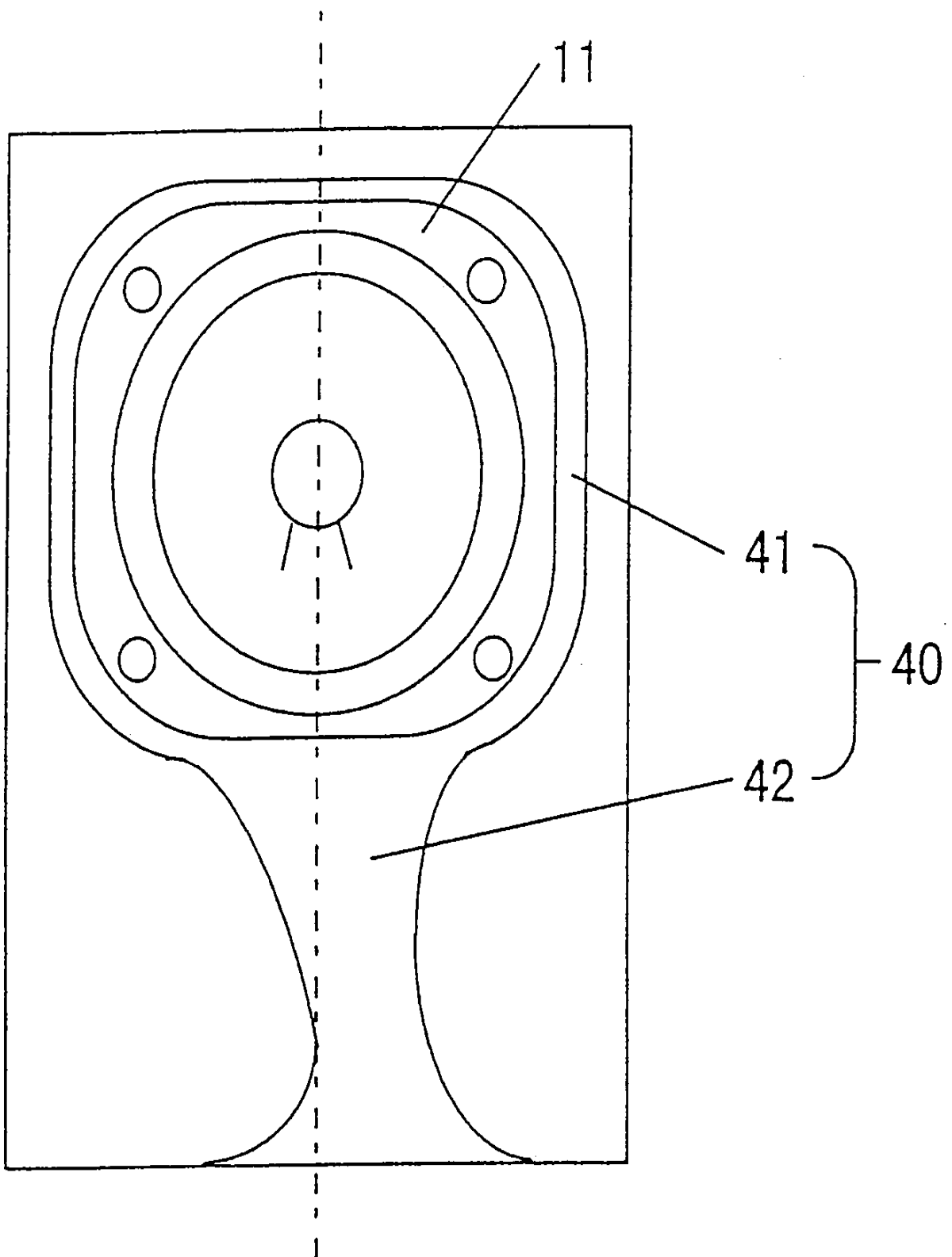




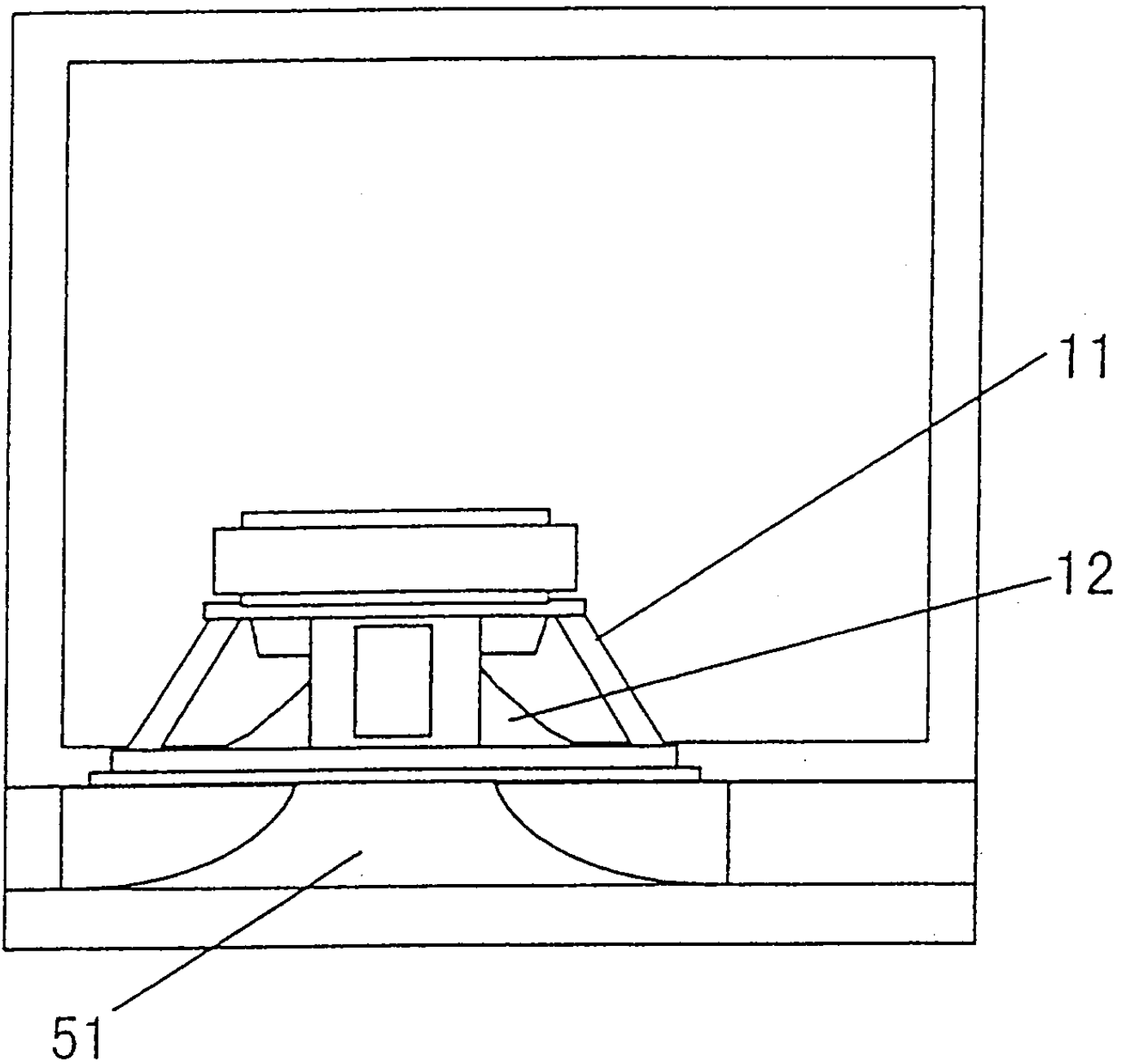
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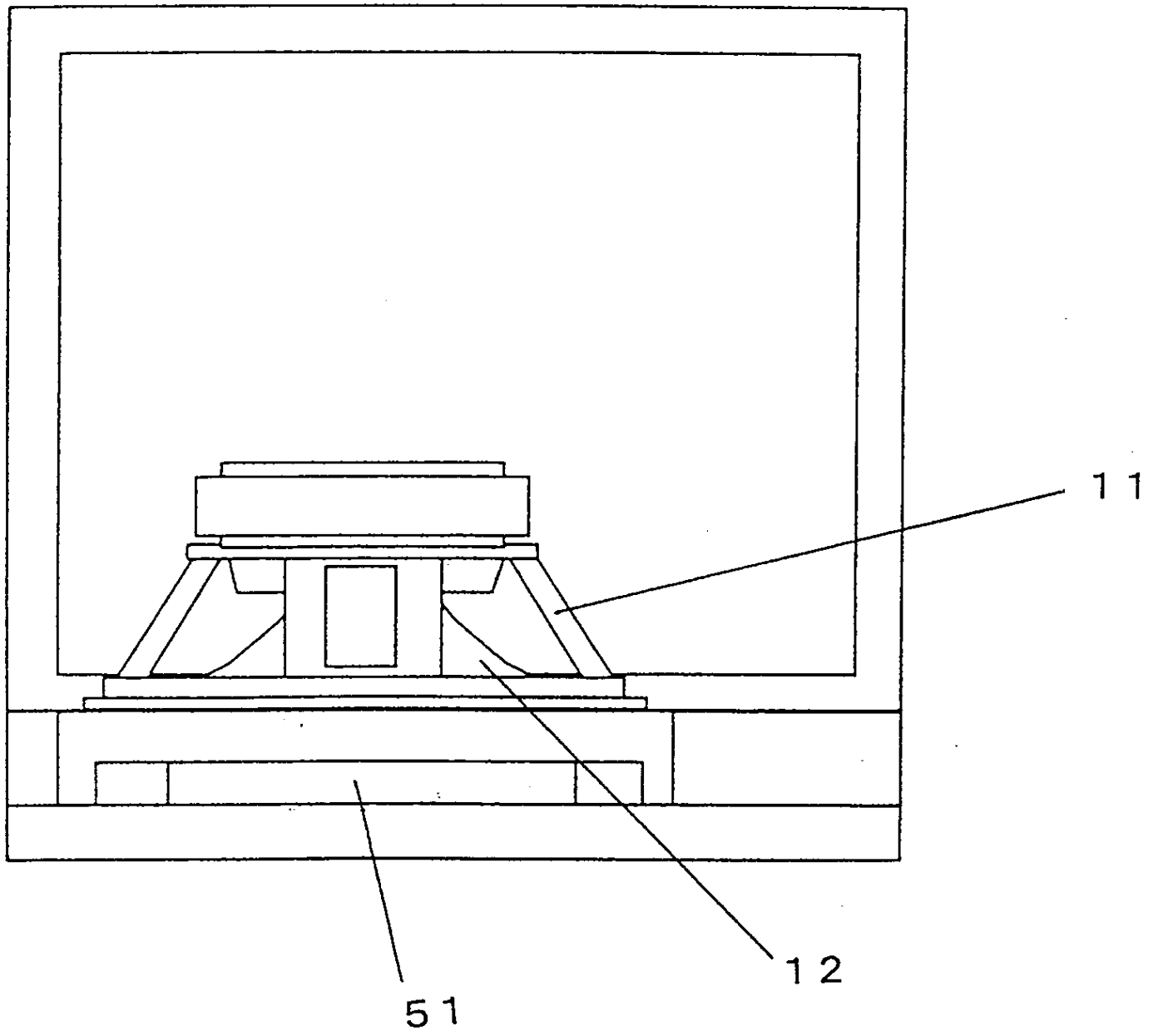
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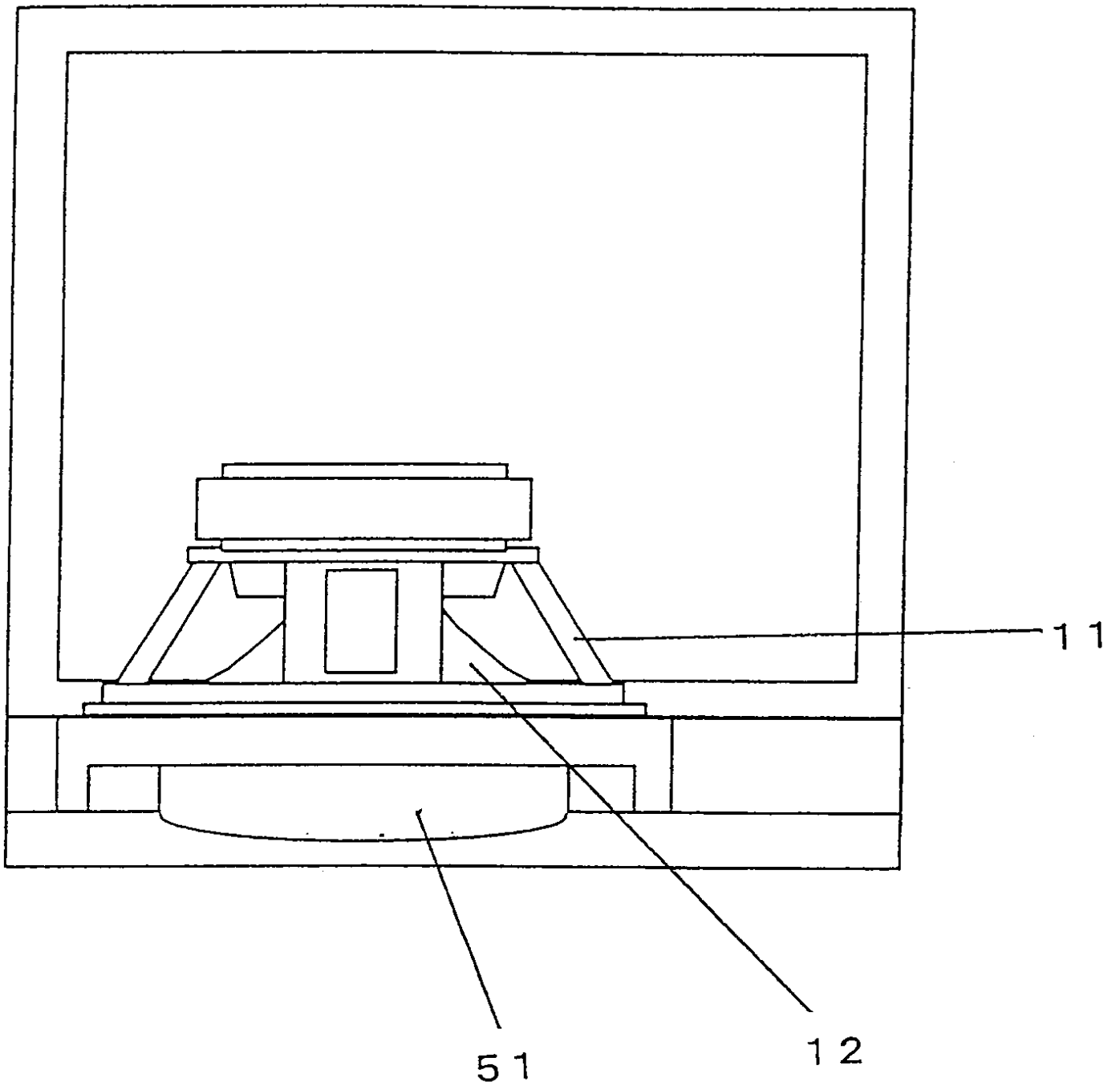
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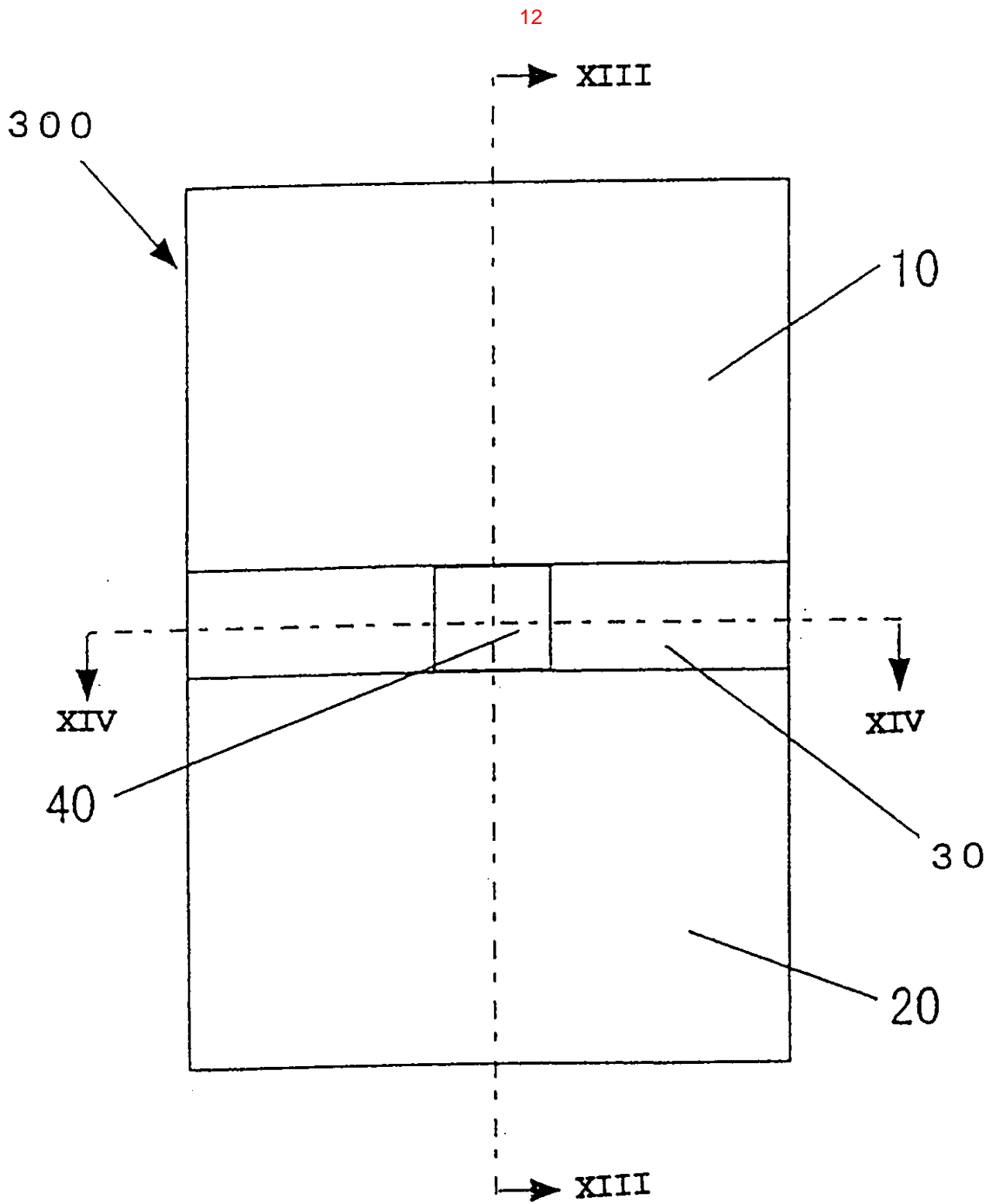


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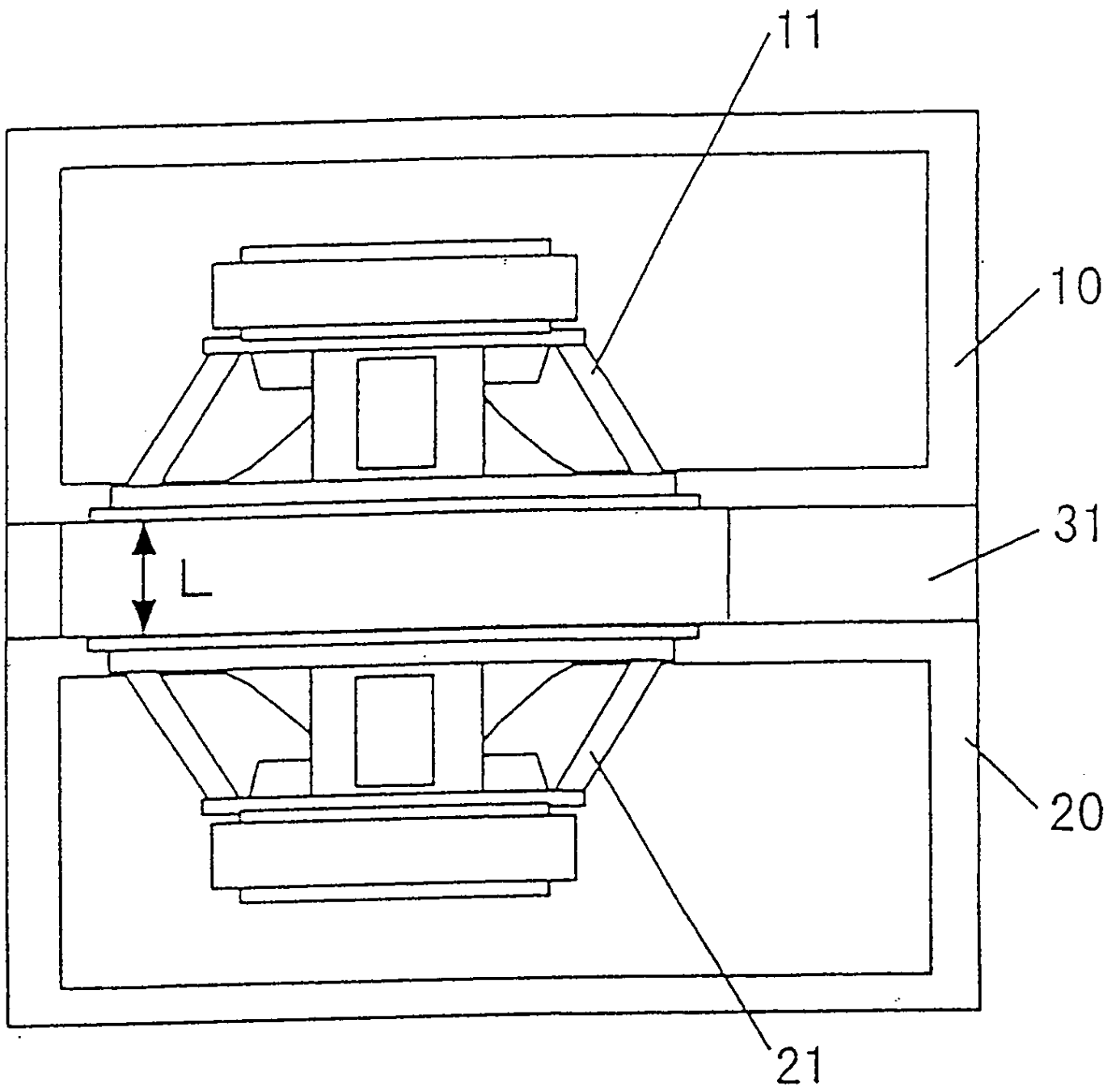


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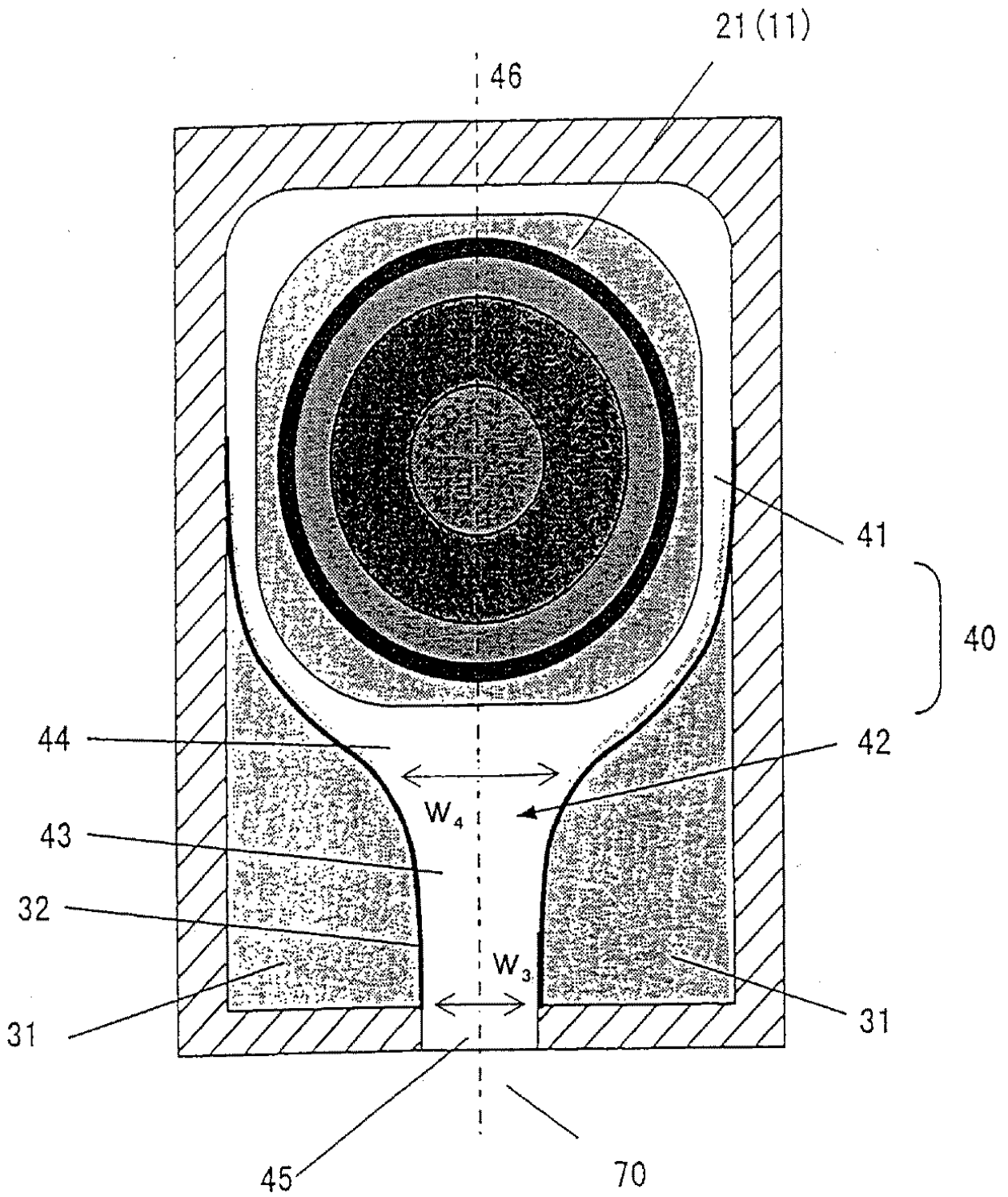




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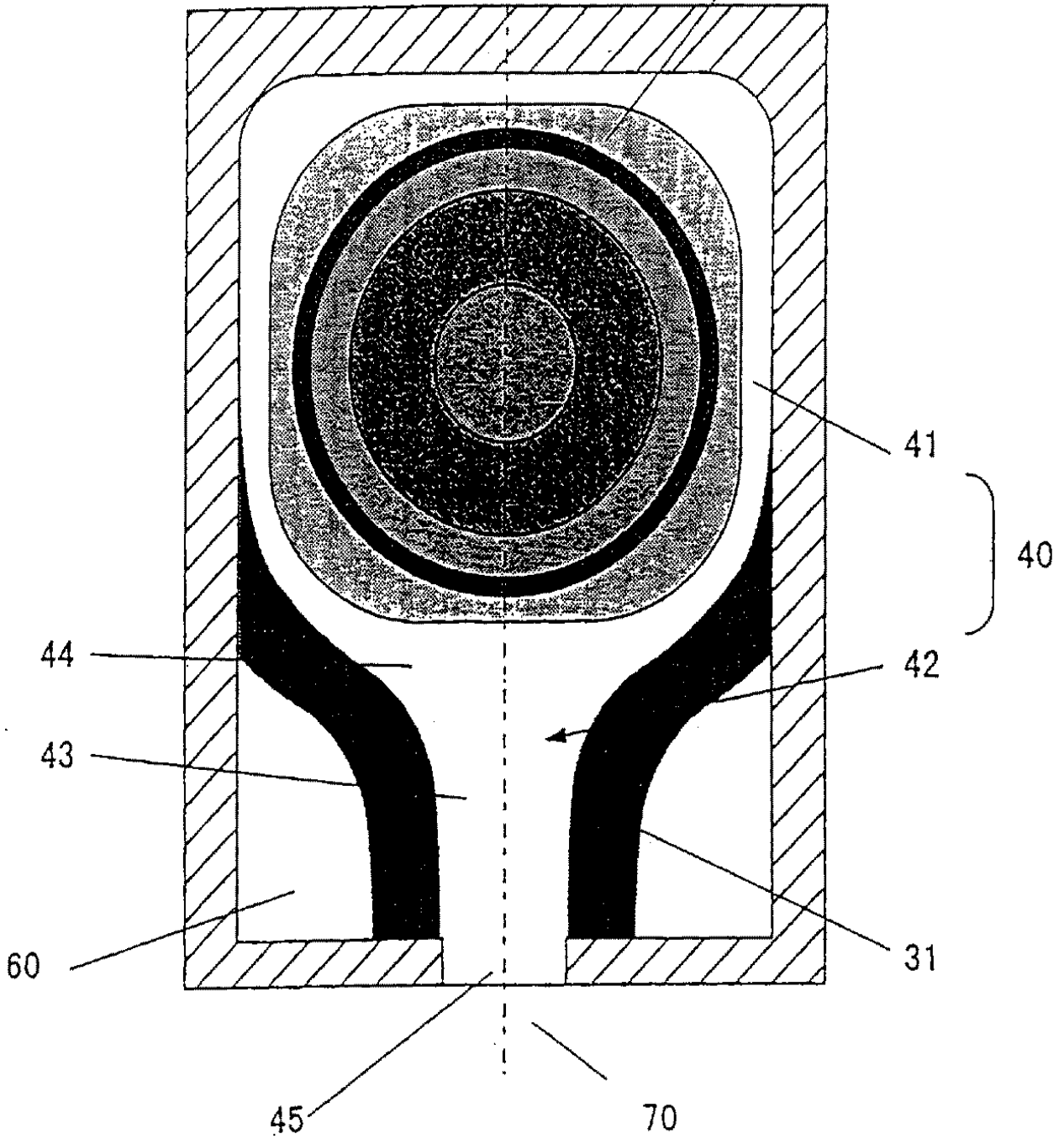
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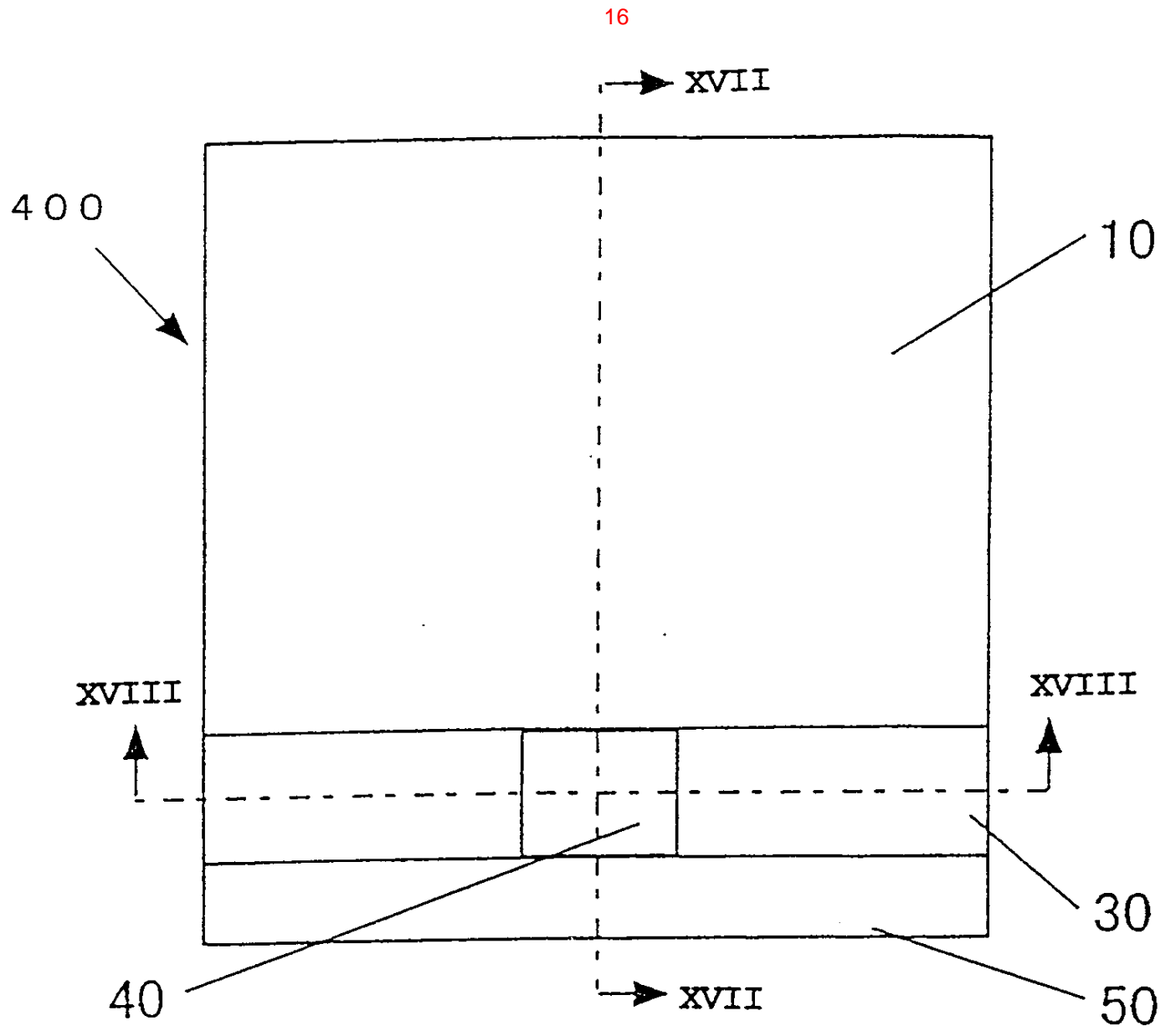
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21(11)

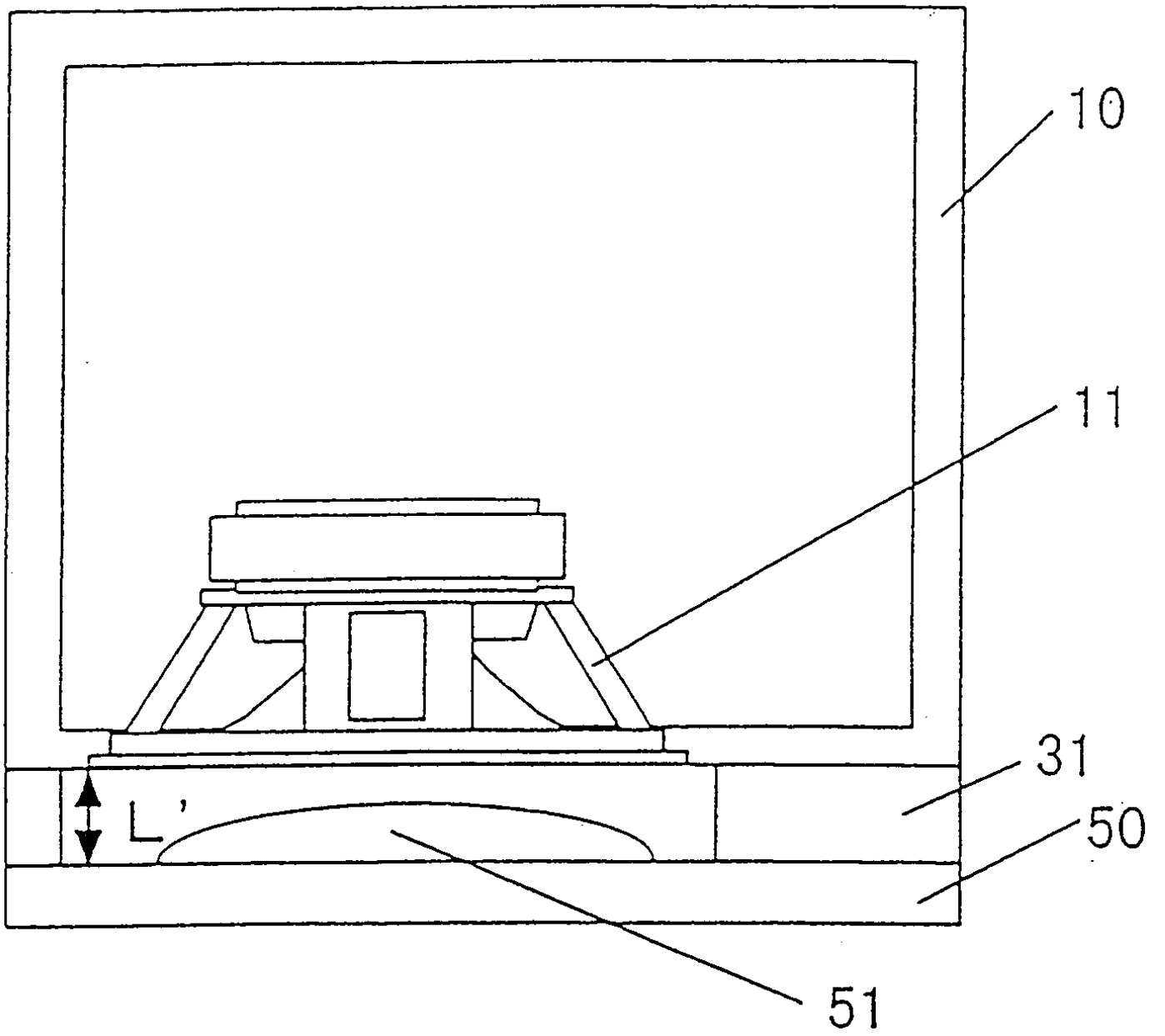
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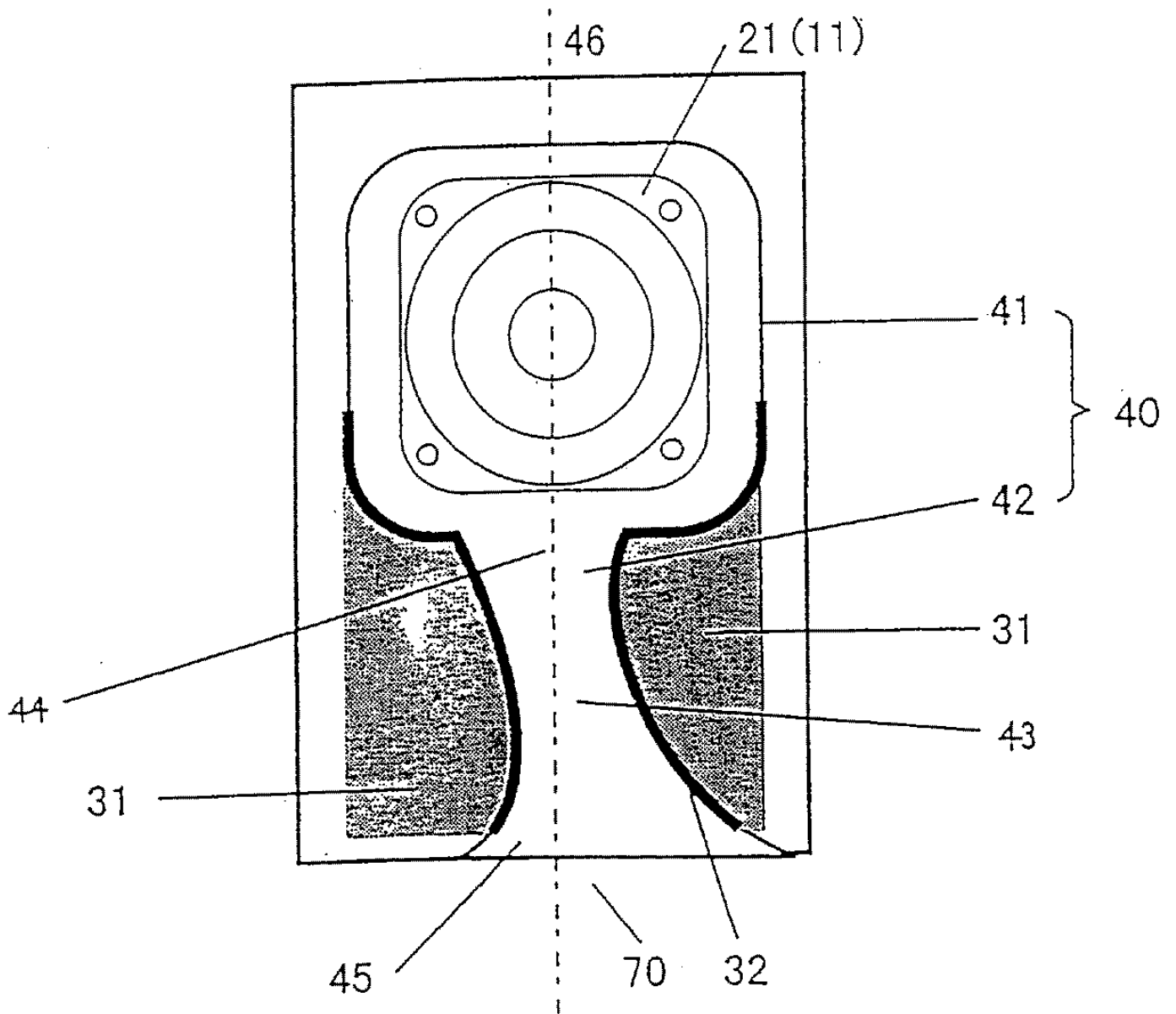
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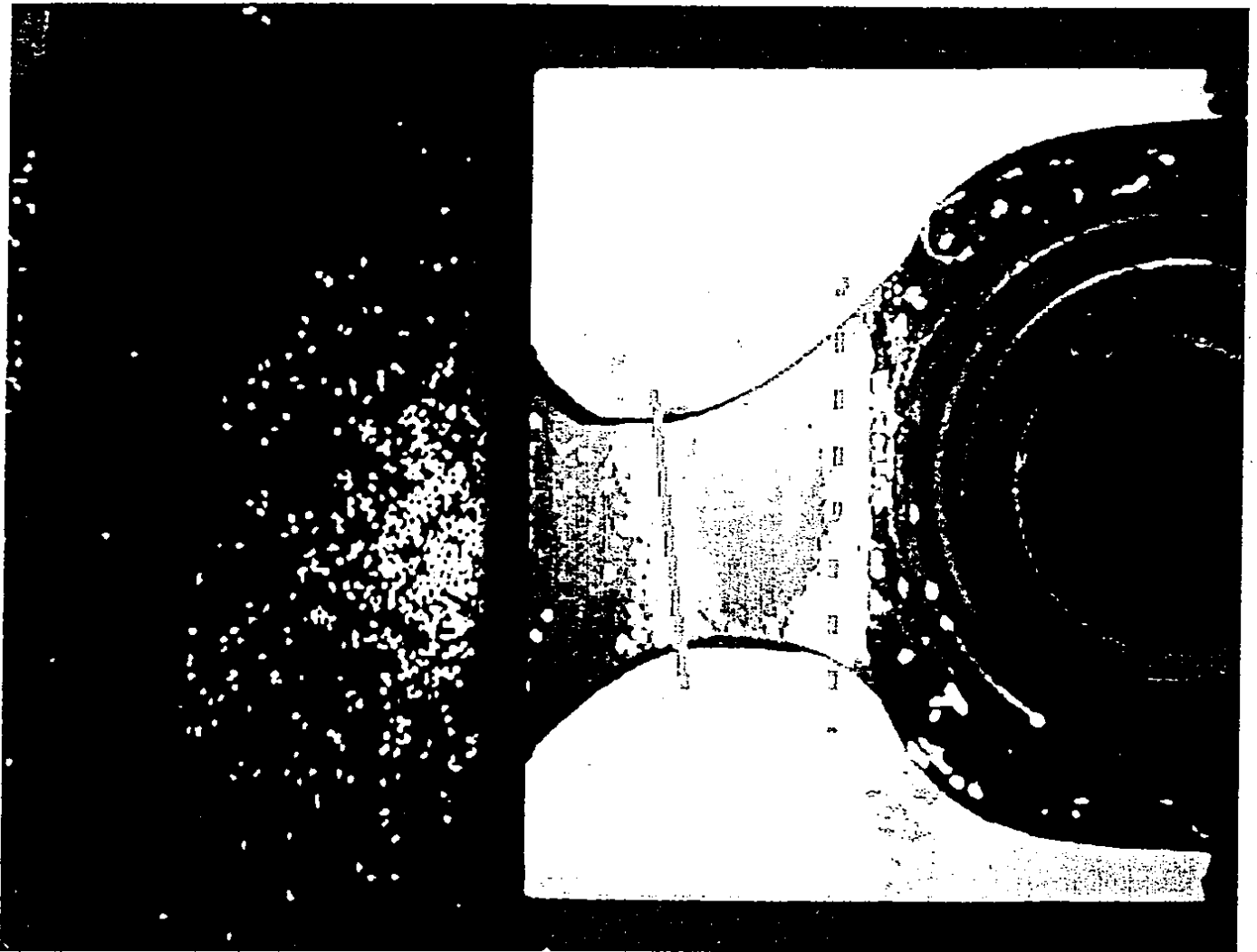


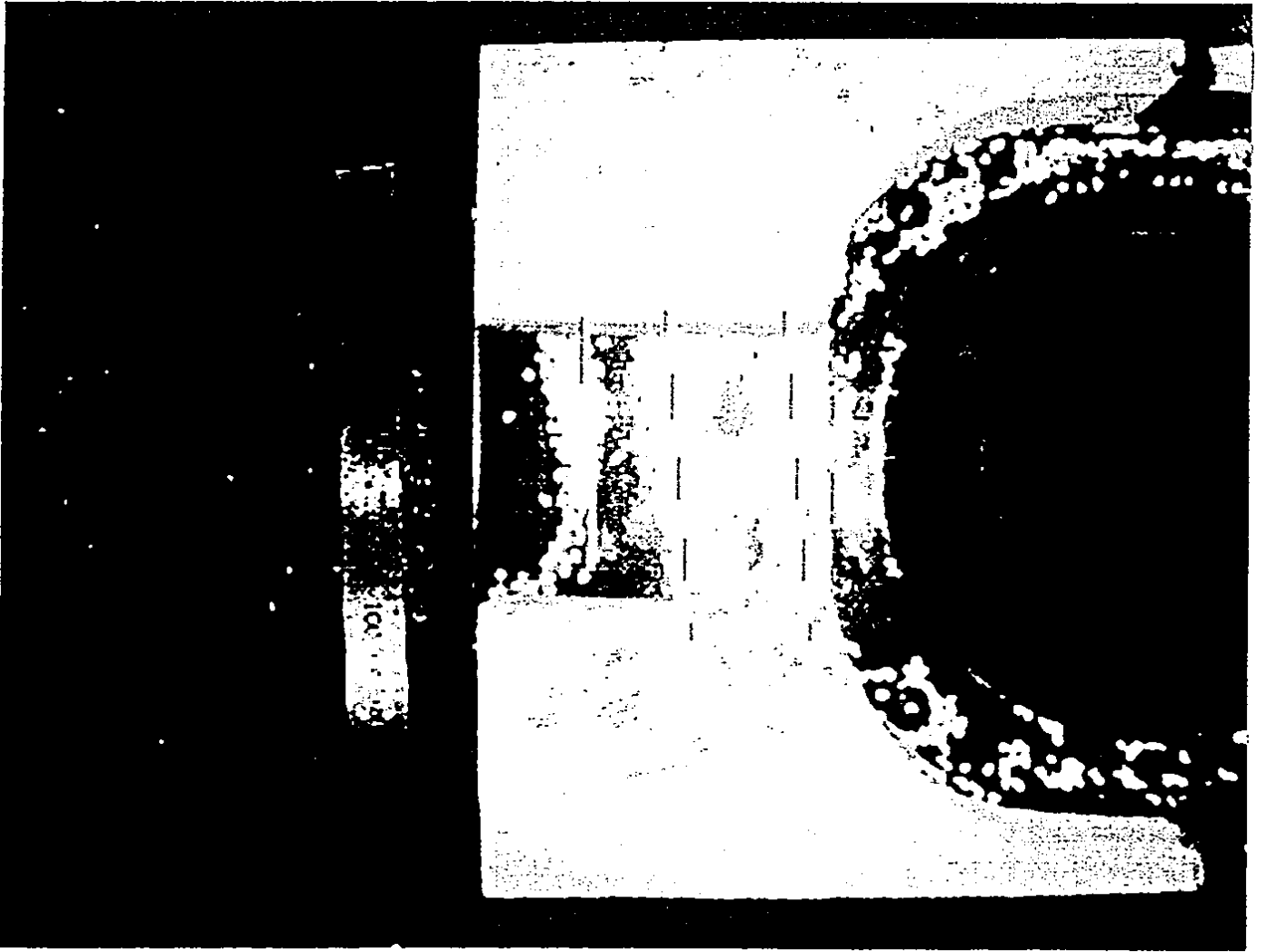
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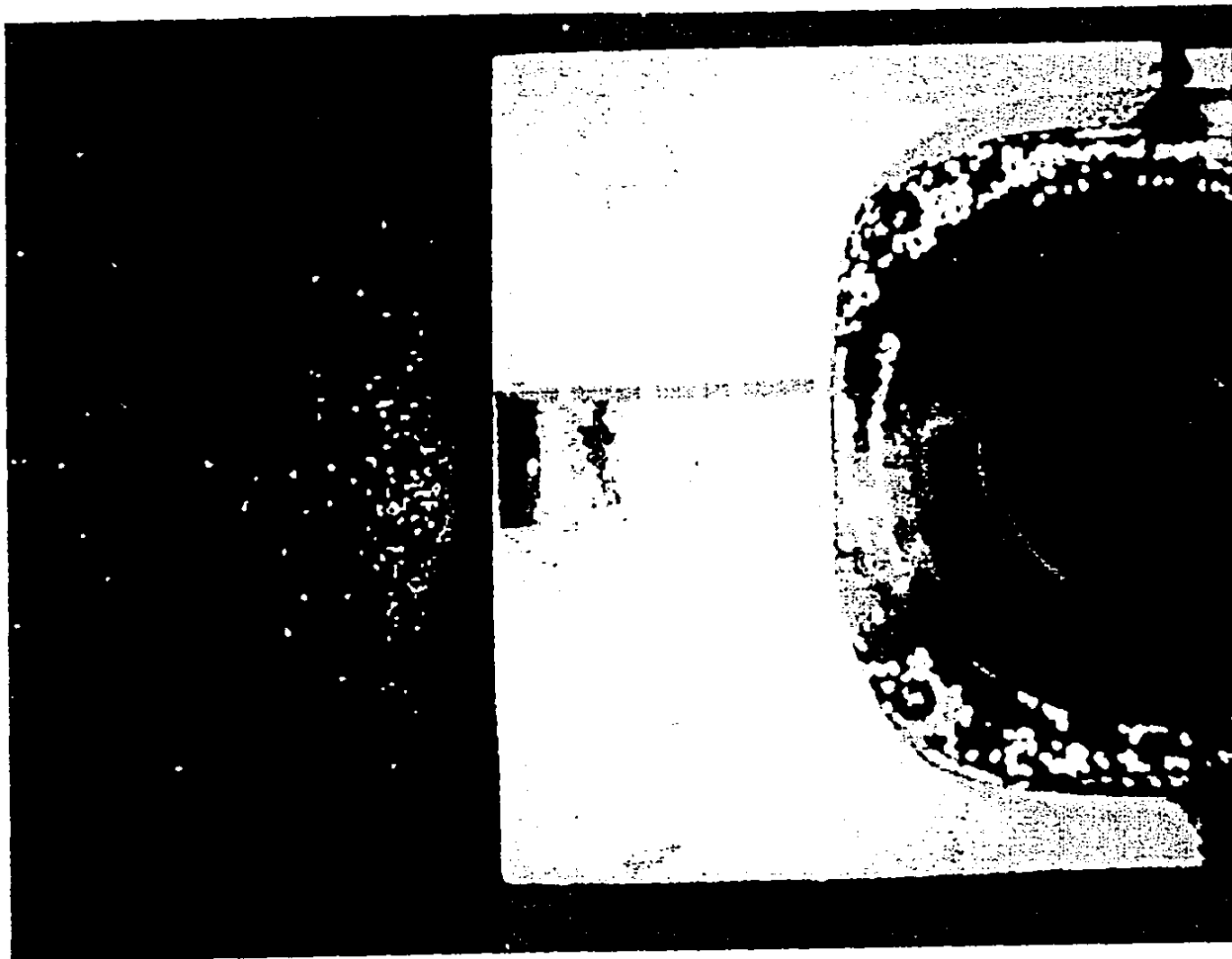


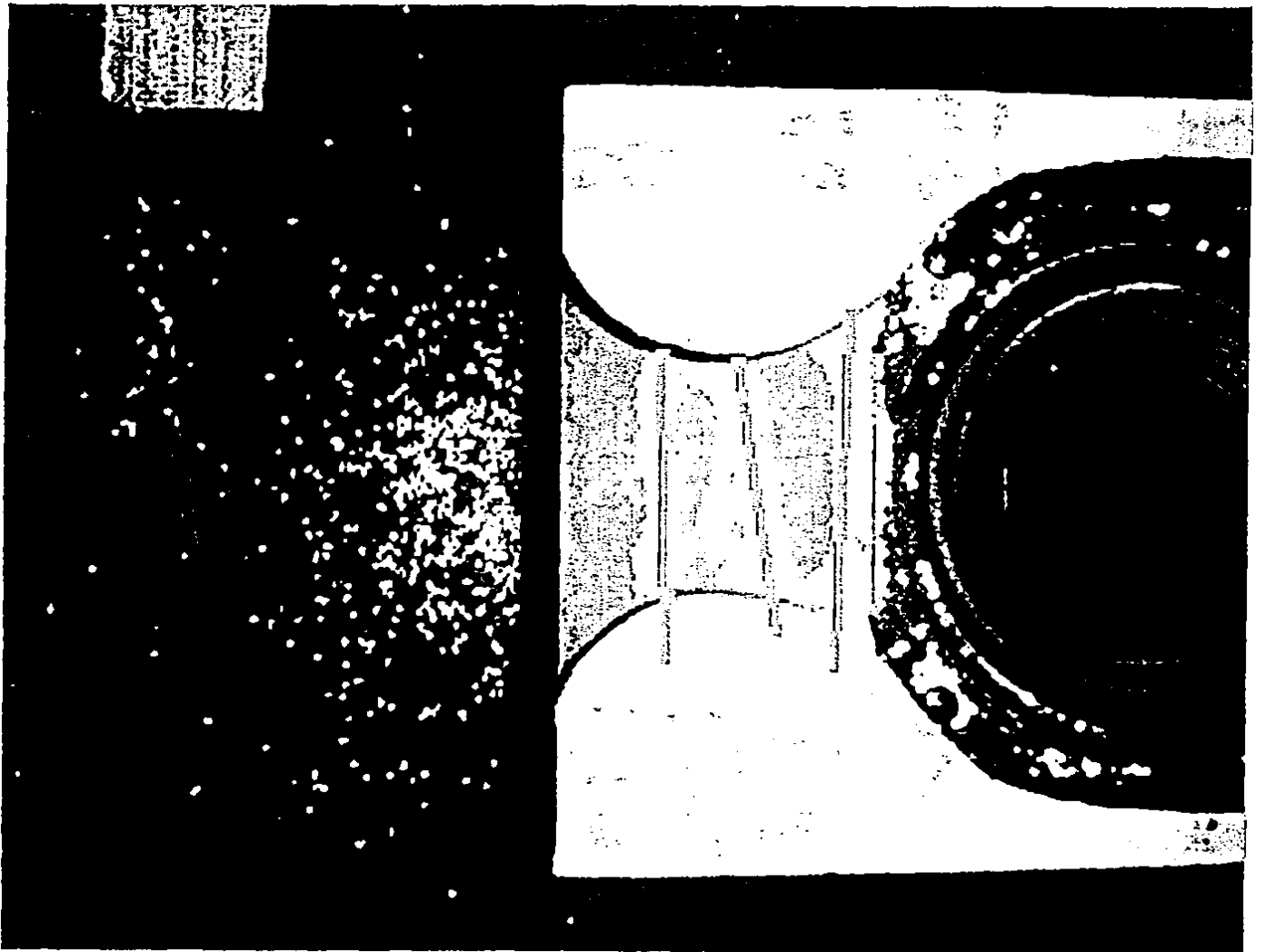
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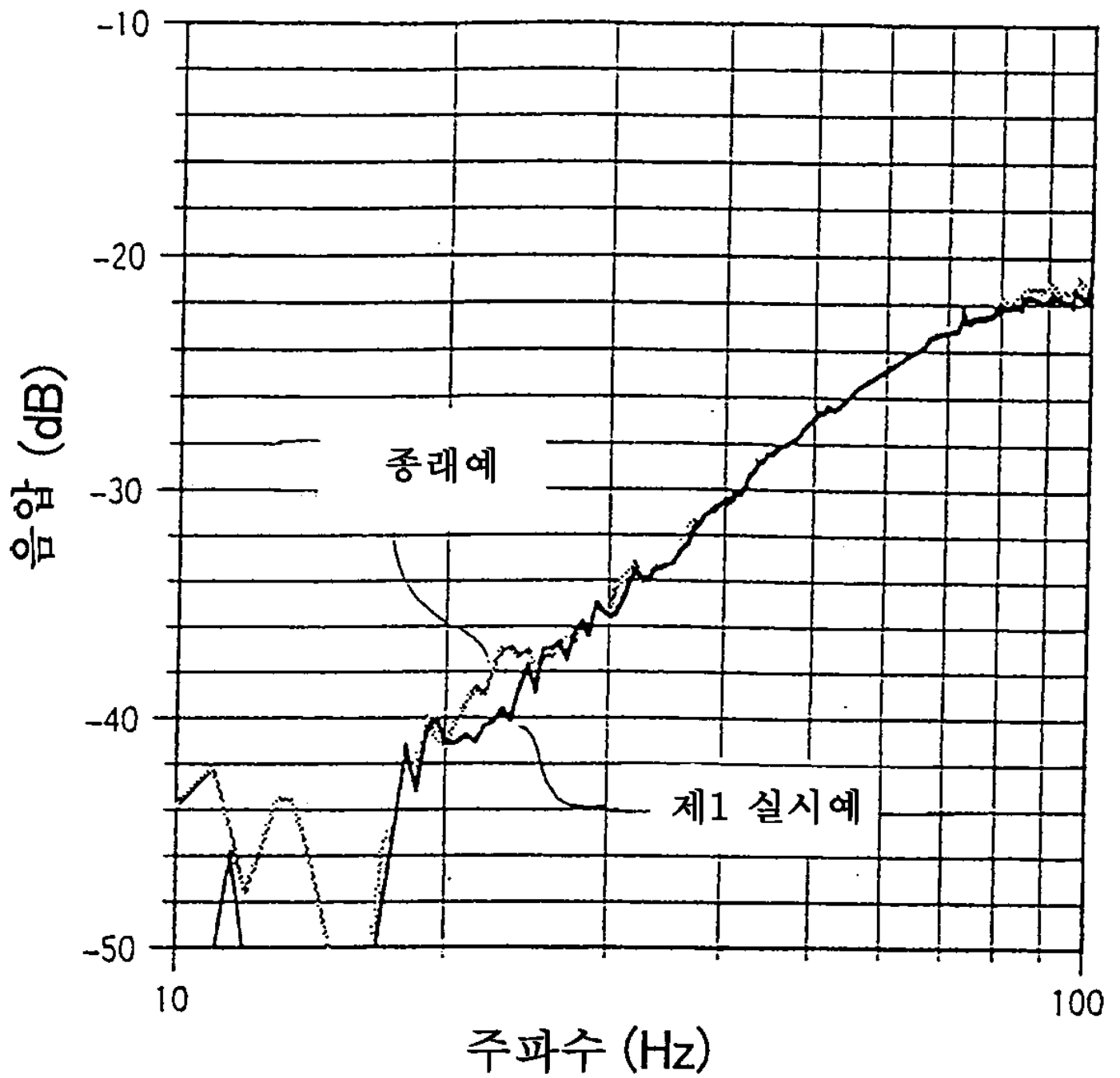


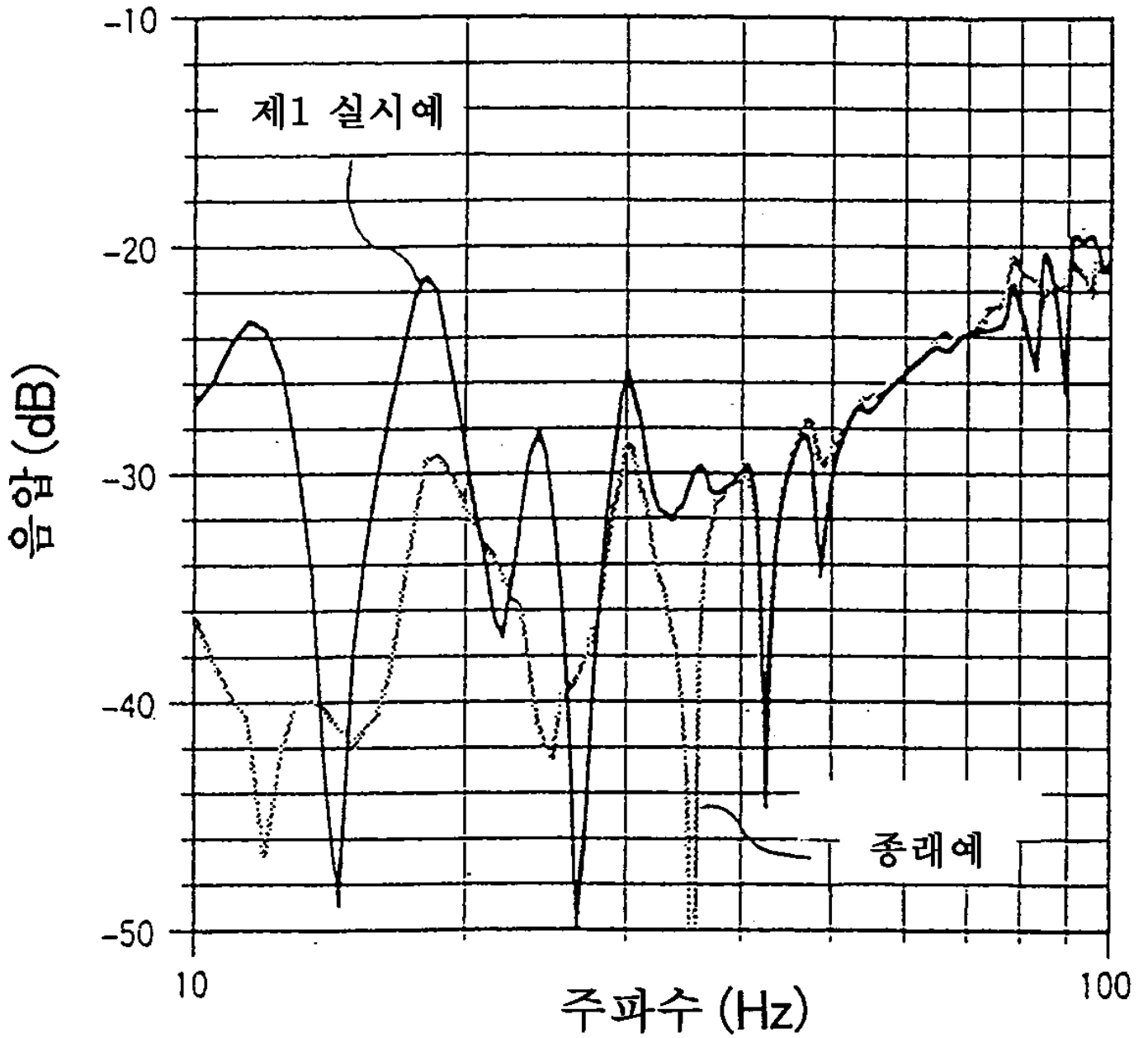




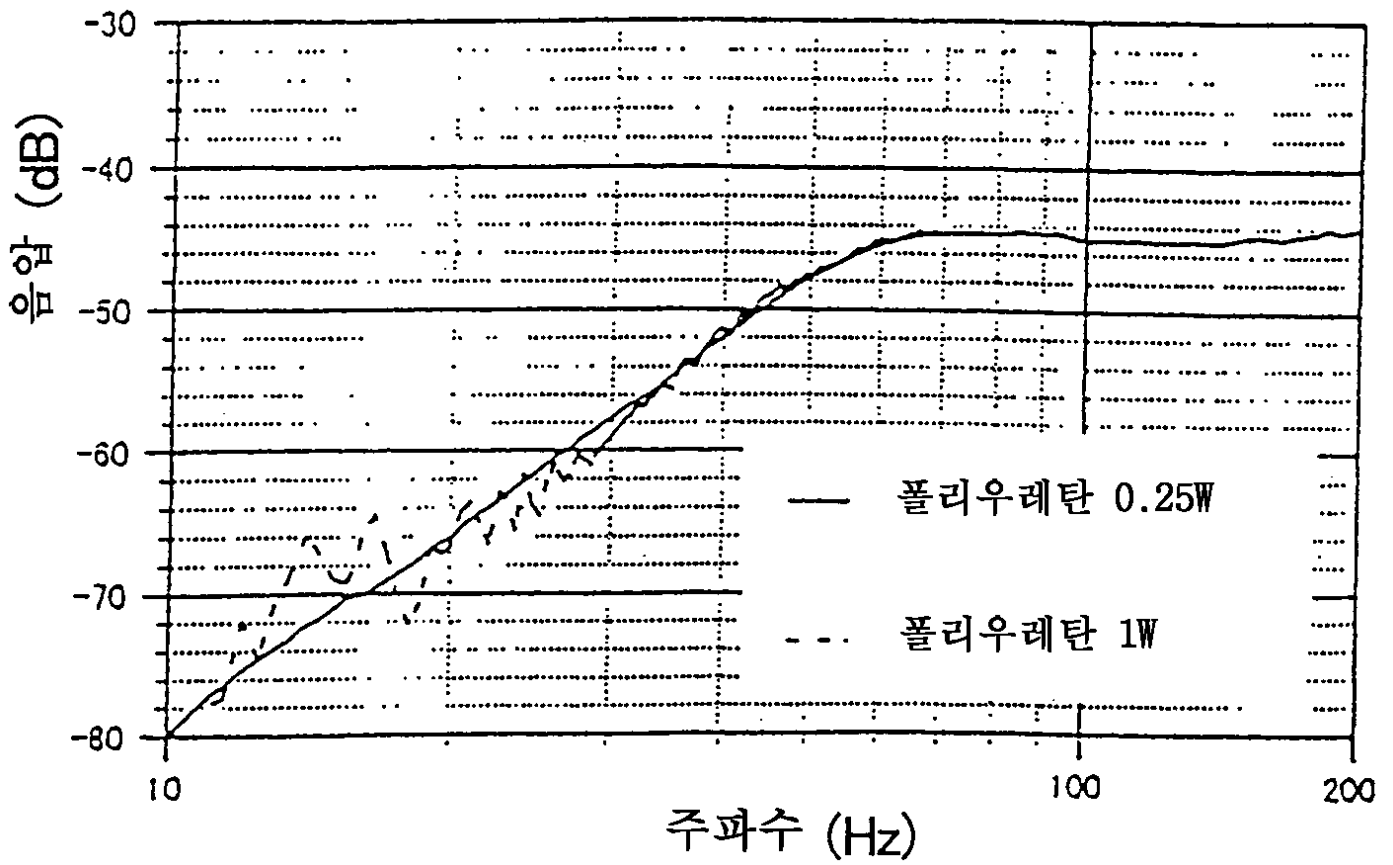




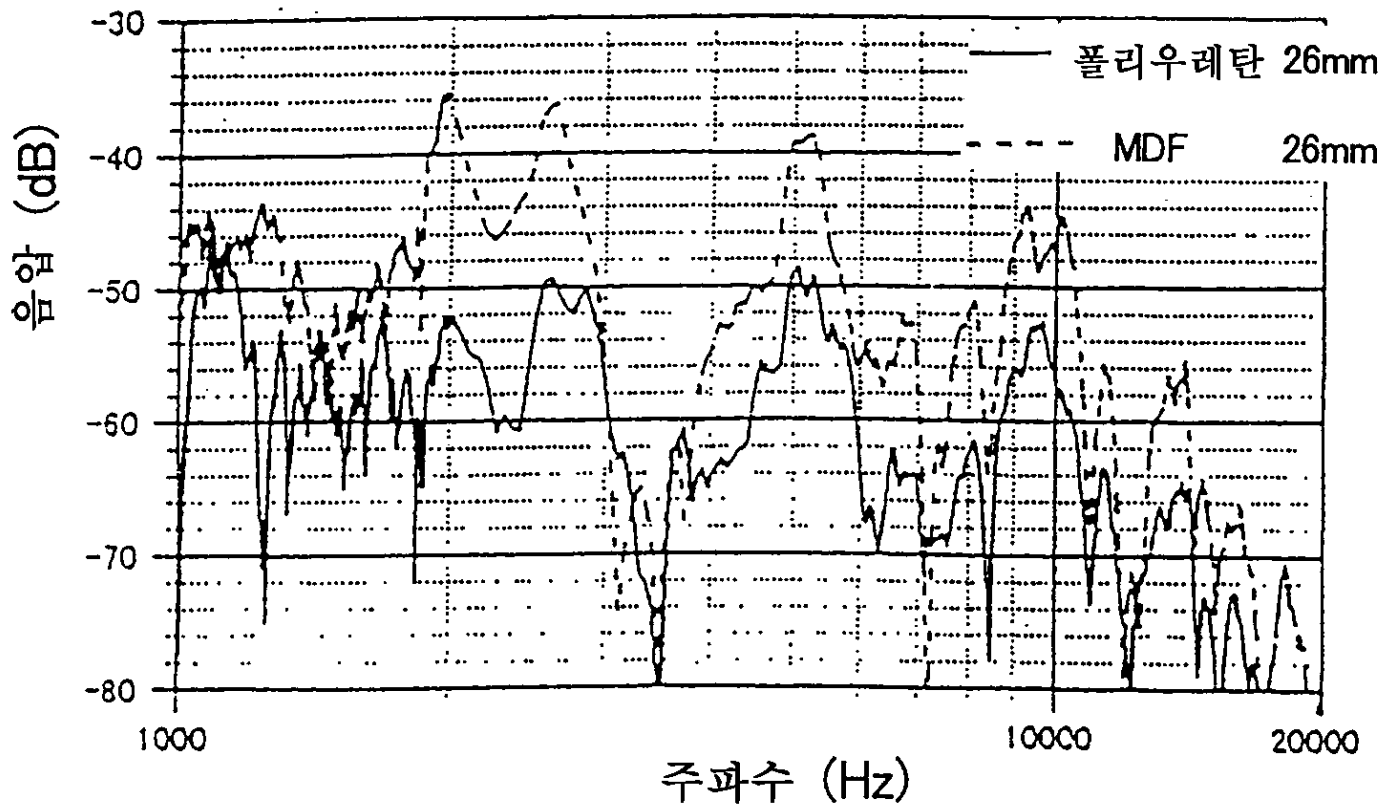




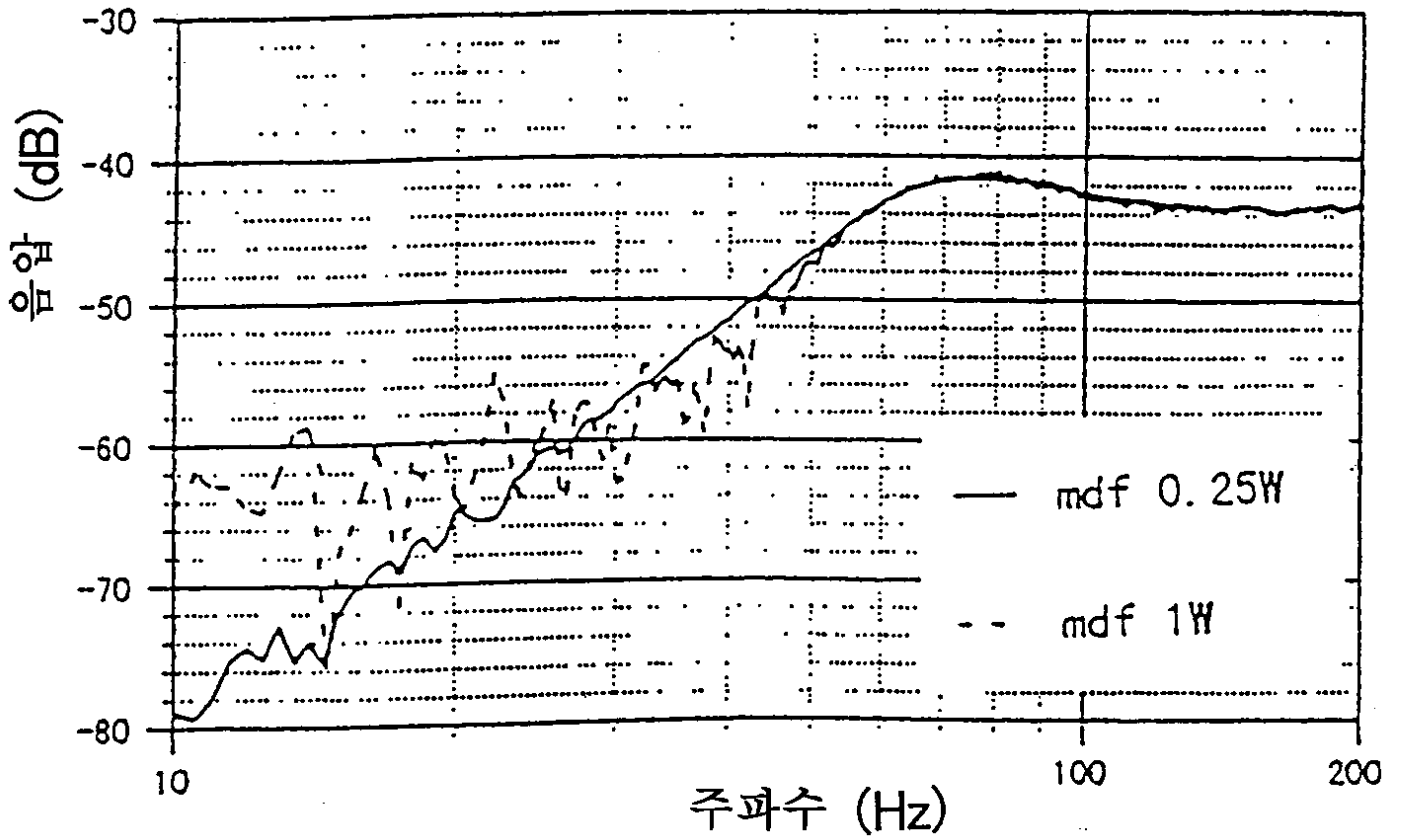
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26



27



28

