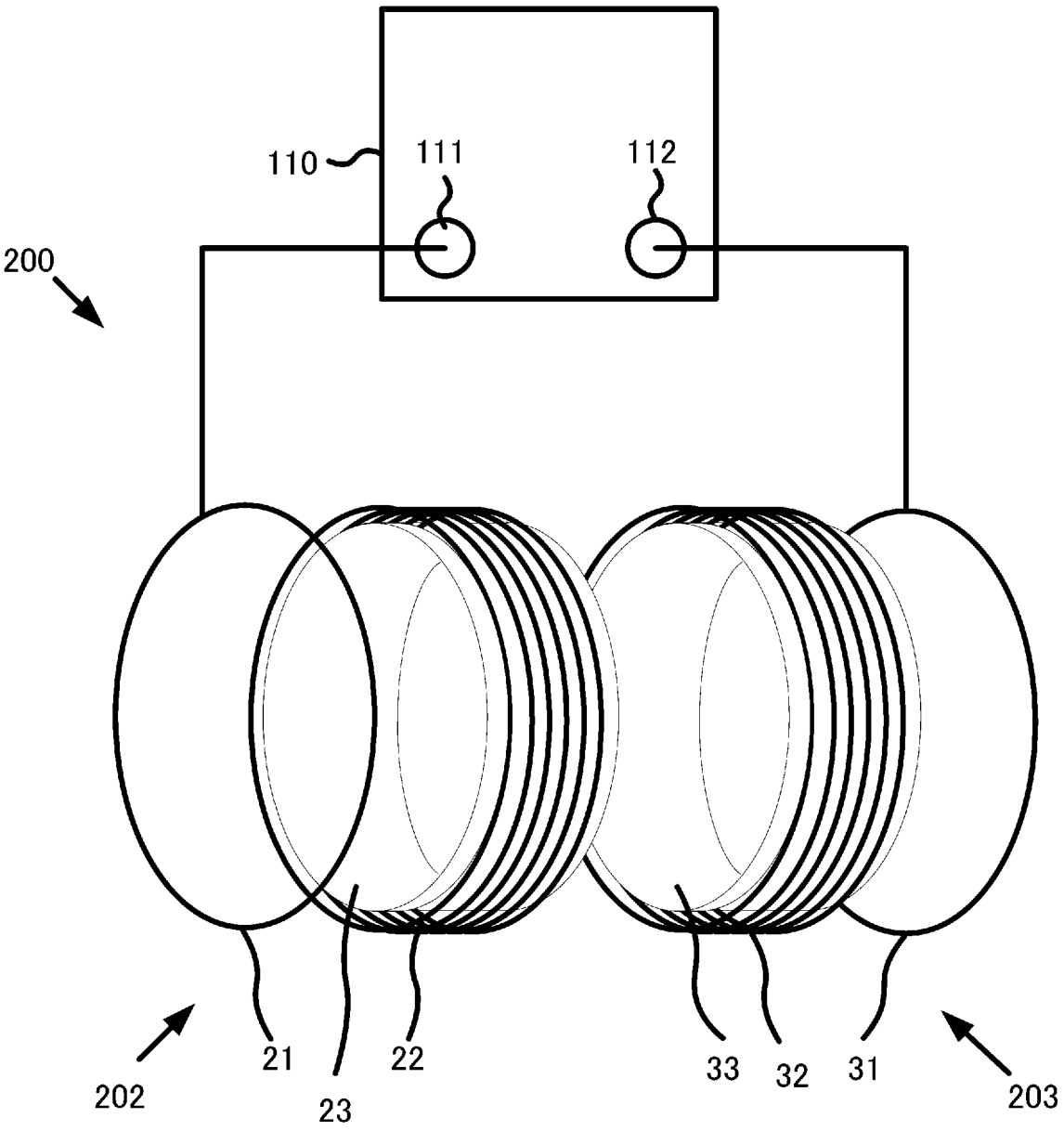
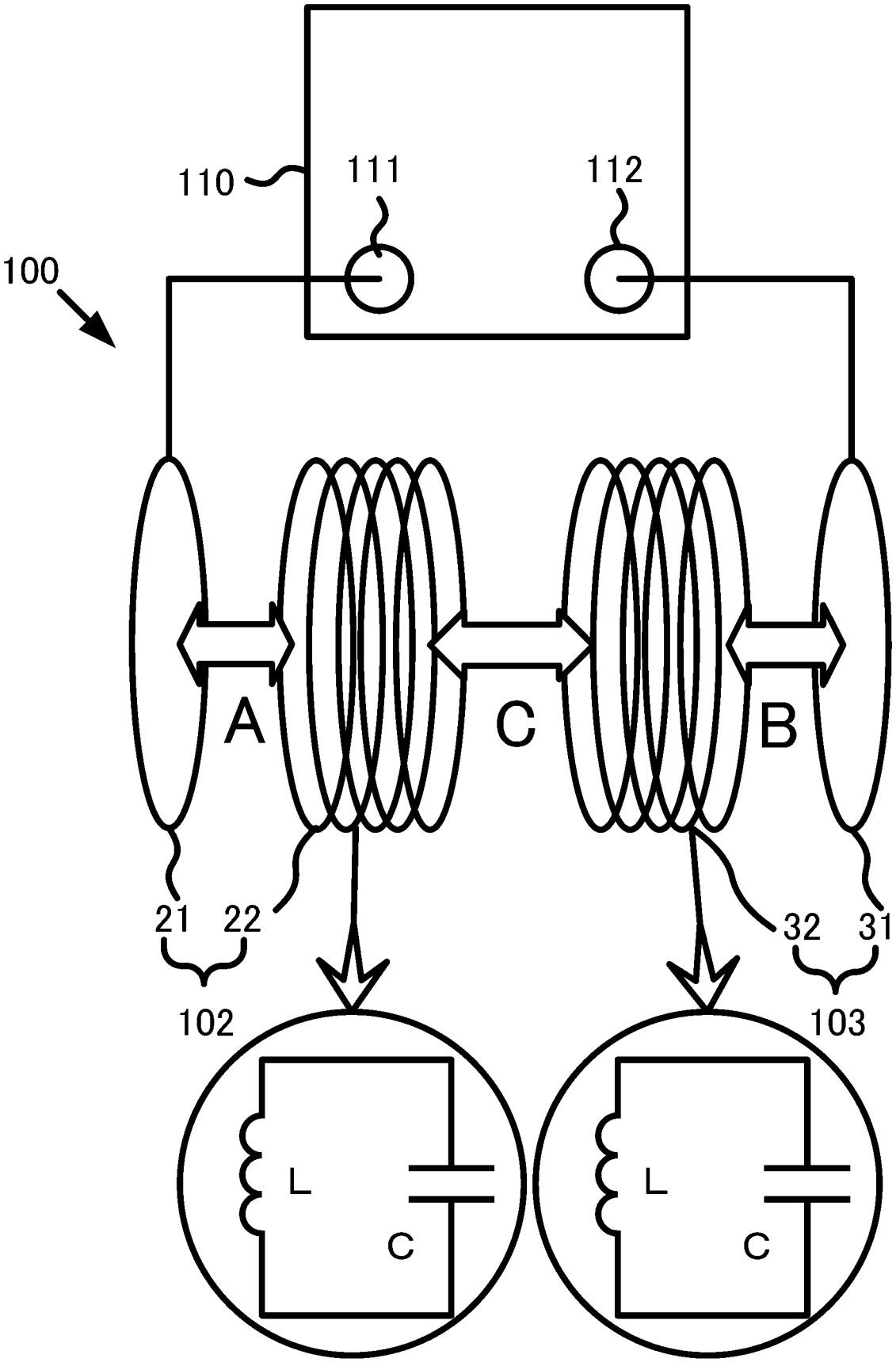
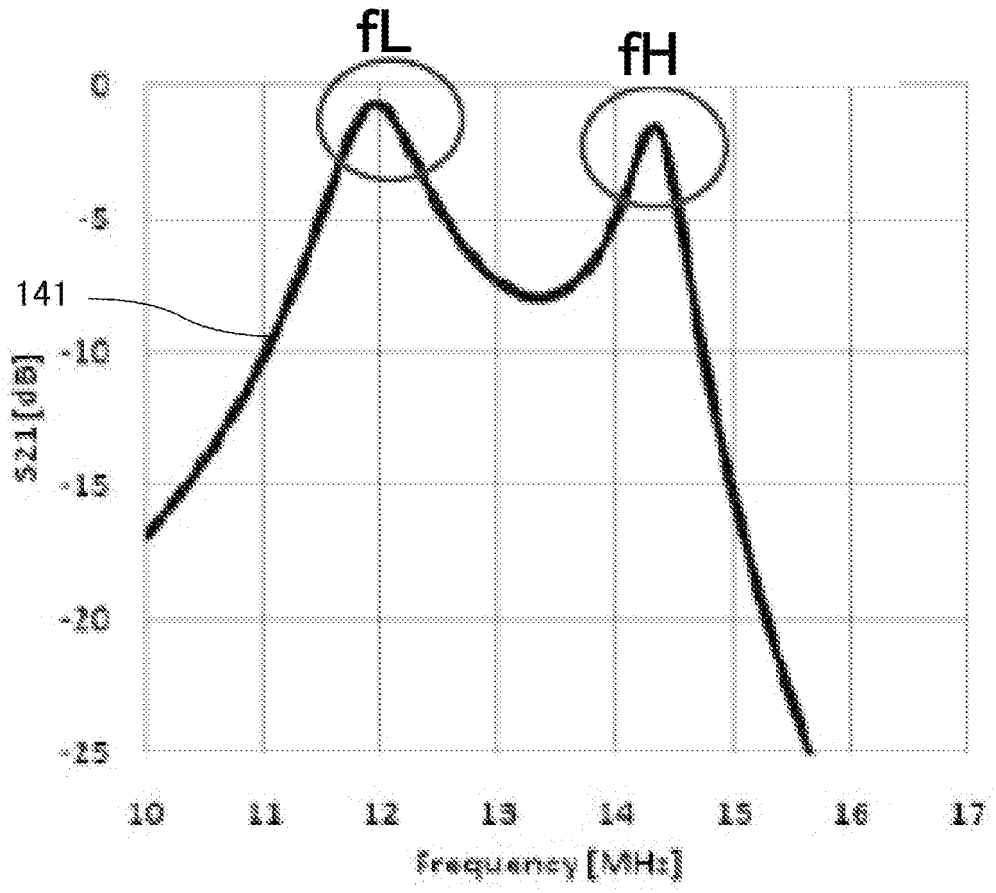
[図1]



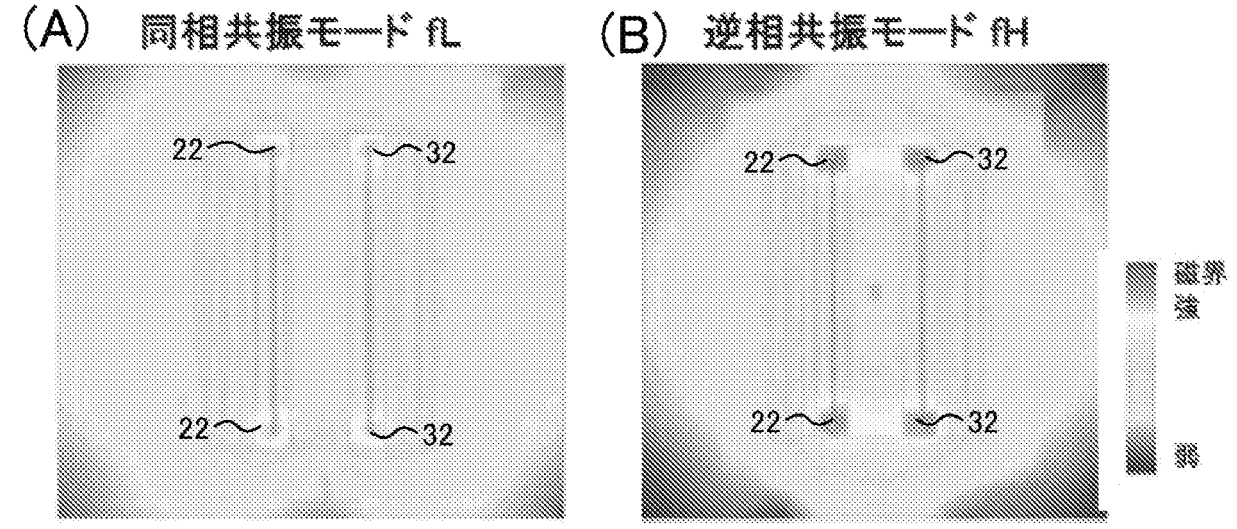
[図2]



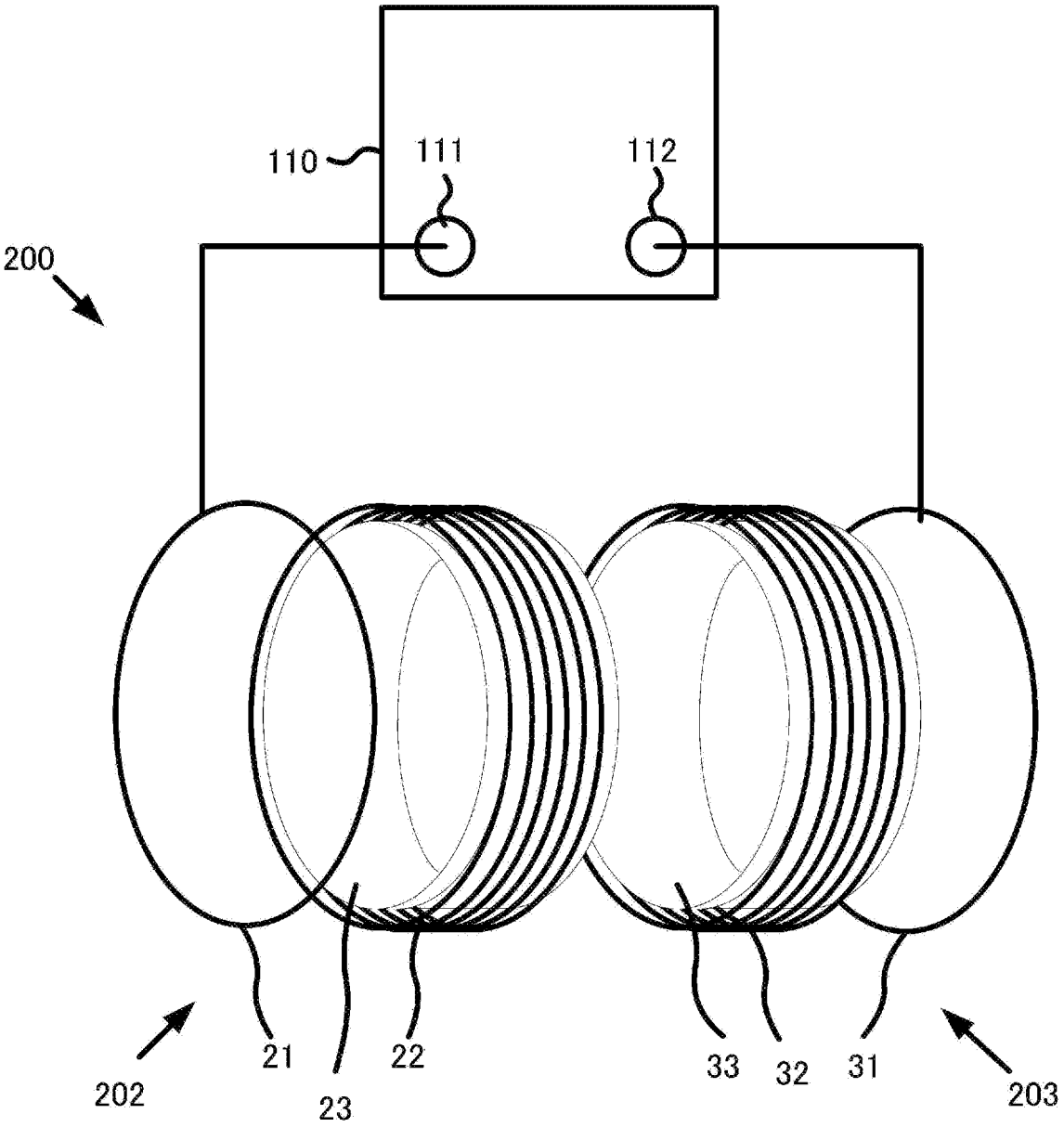
[図3]


fL
fH
141
0
-5
-10
-15
-20
-25
S21 [dB]
10
11
12
13
14
15
16
17
Frequency [MHz]

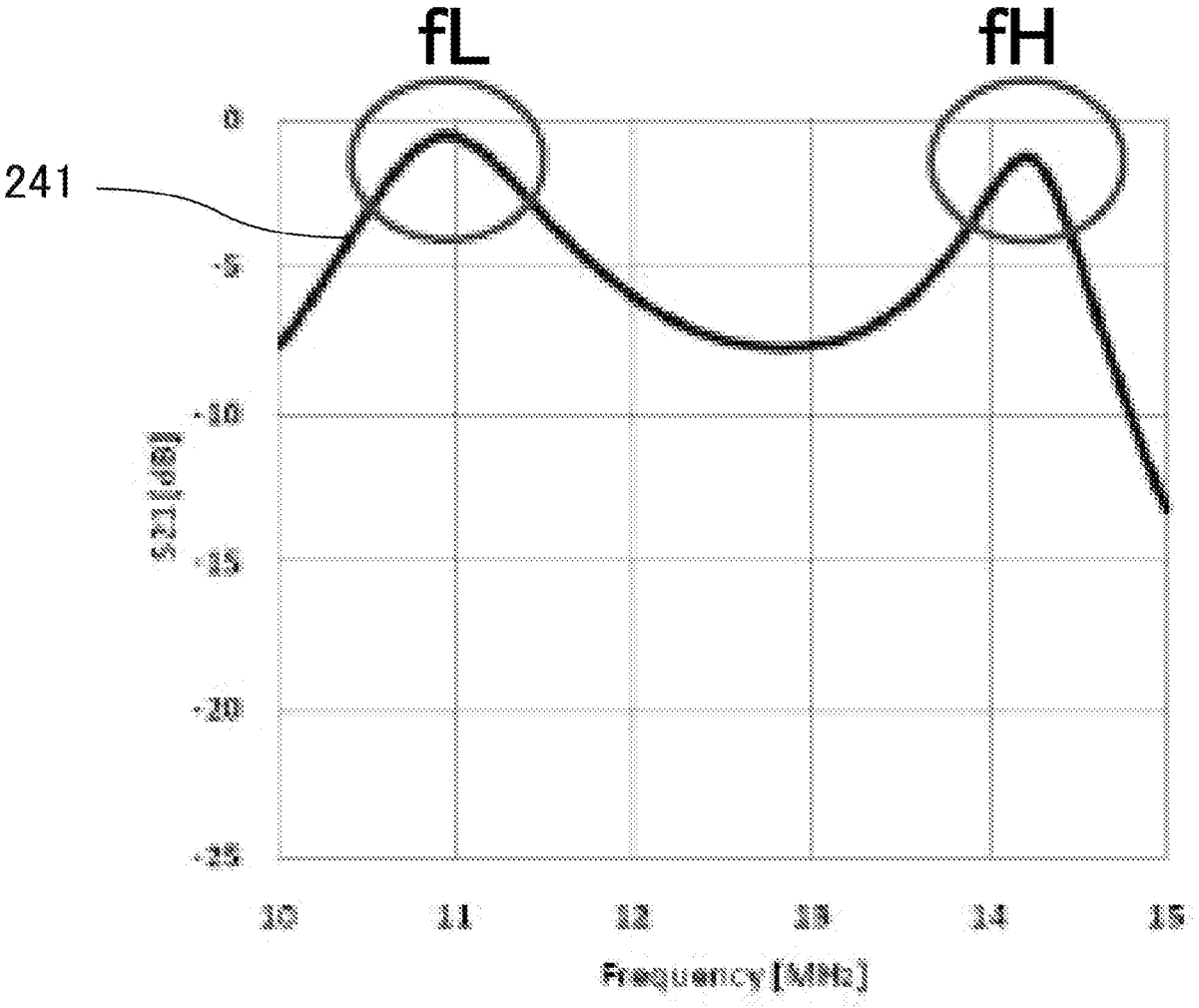
[図4]


(A) 同相共振モード fL
(B) 逆相共振モード fH
22
32
22
32
22
32
22
32
磁界強
弱

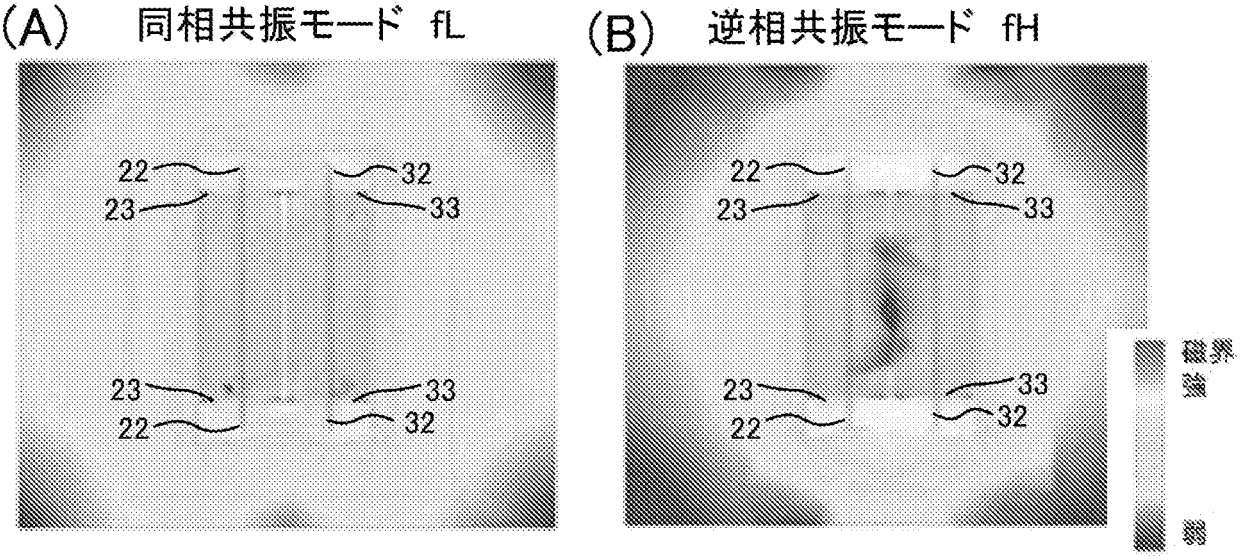
[図5]



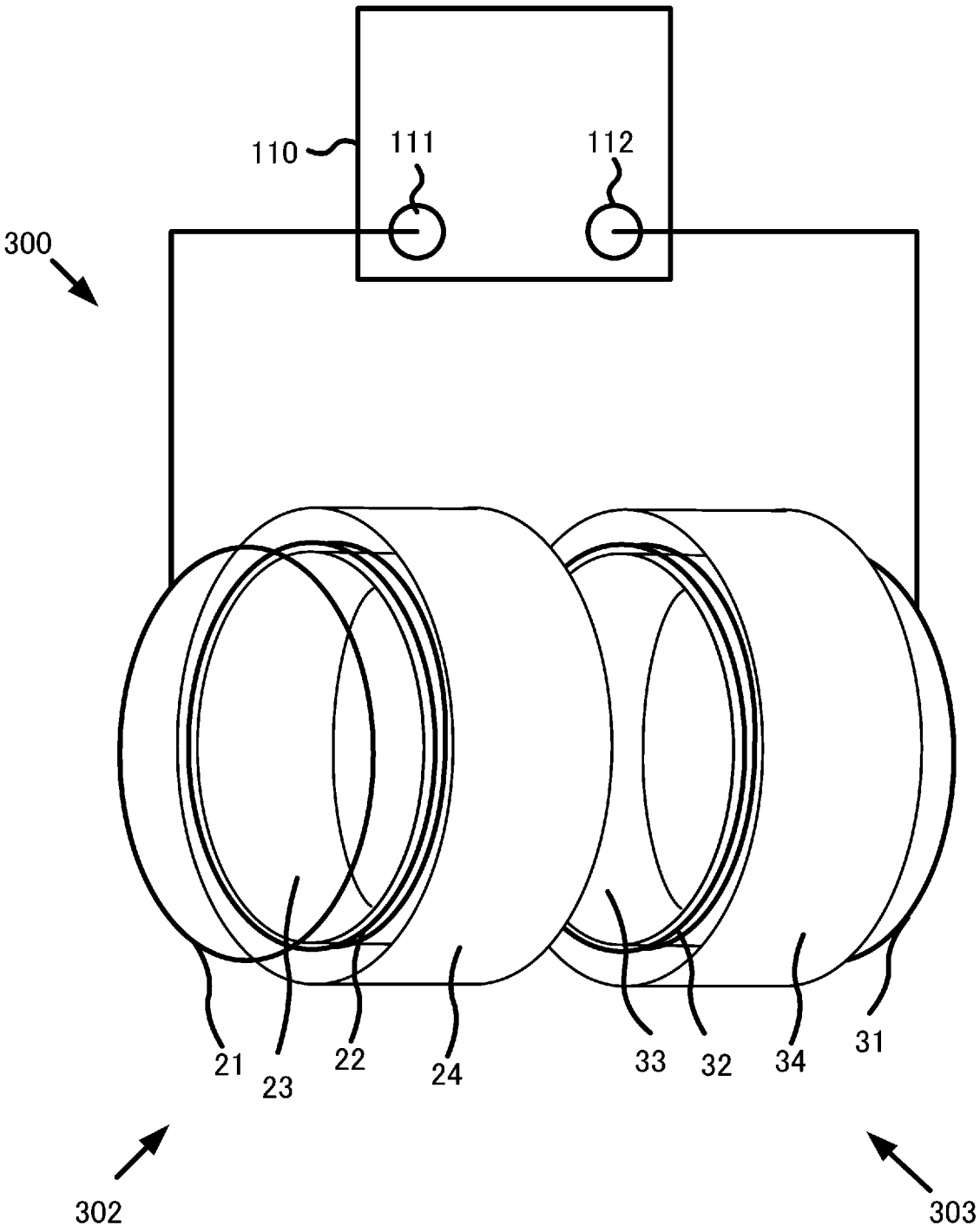
[図6]


fL
fH
241
0
-5
-10
-15
-20
-25
S21[dB]
10
11
12
13
14
15
Frequency[MHz]

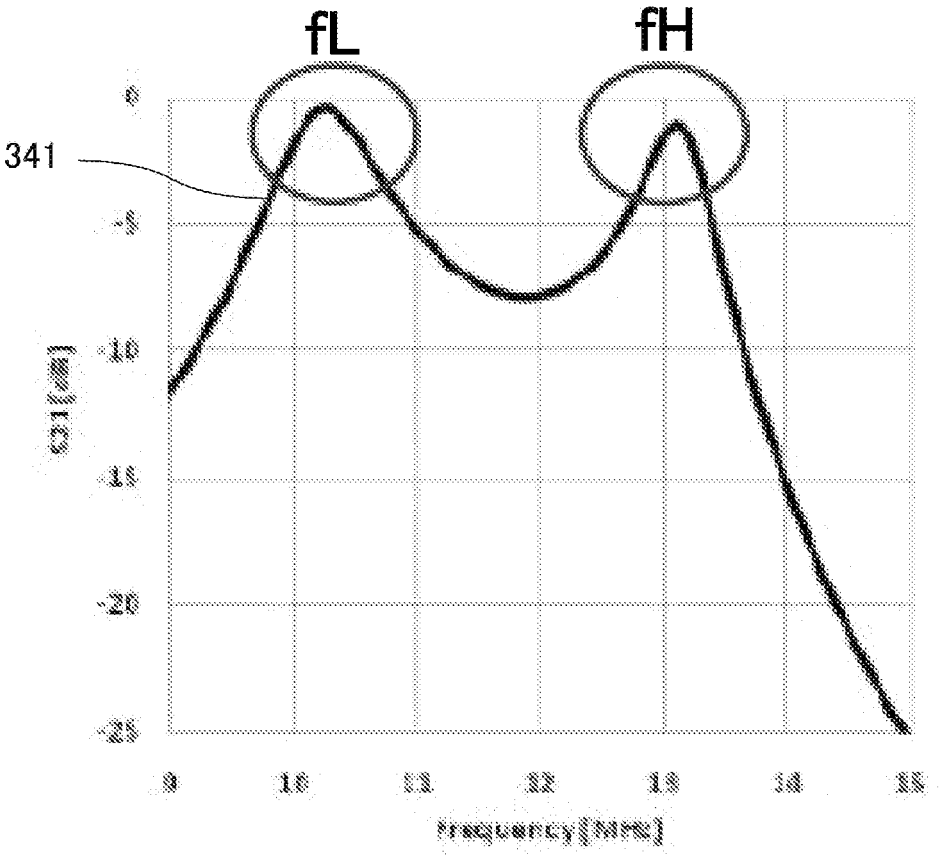
[図7]


(A) 同相共振モード fL
(B) 逆相共振モード fH
22
23
32
33
磁界強
弱

[図8]

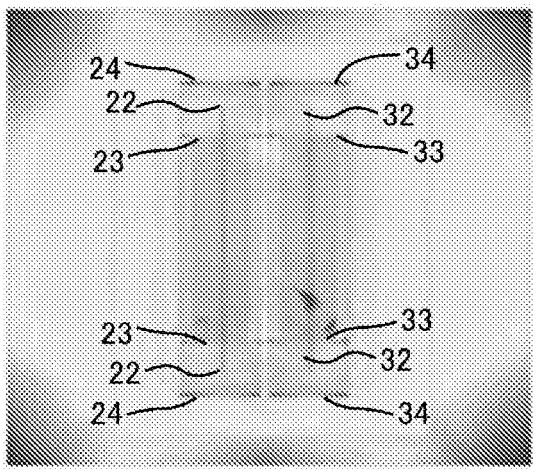


[図9]

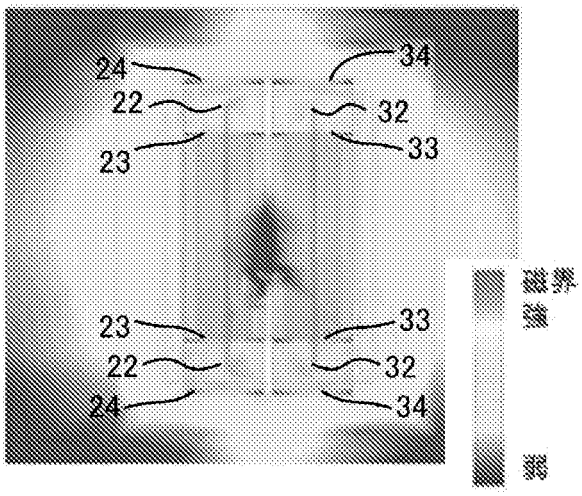


[図10]

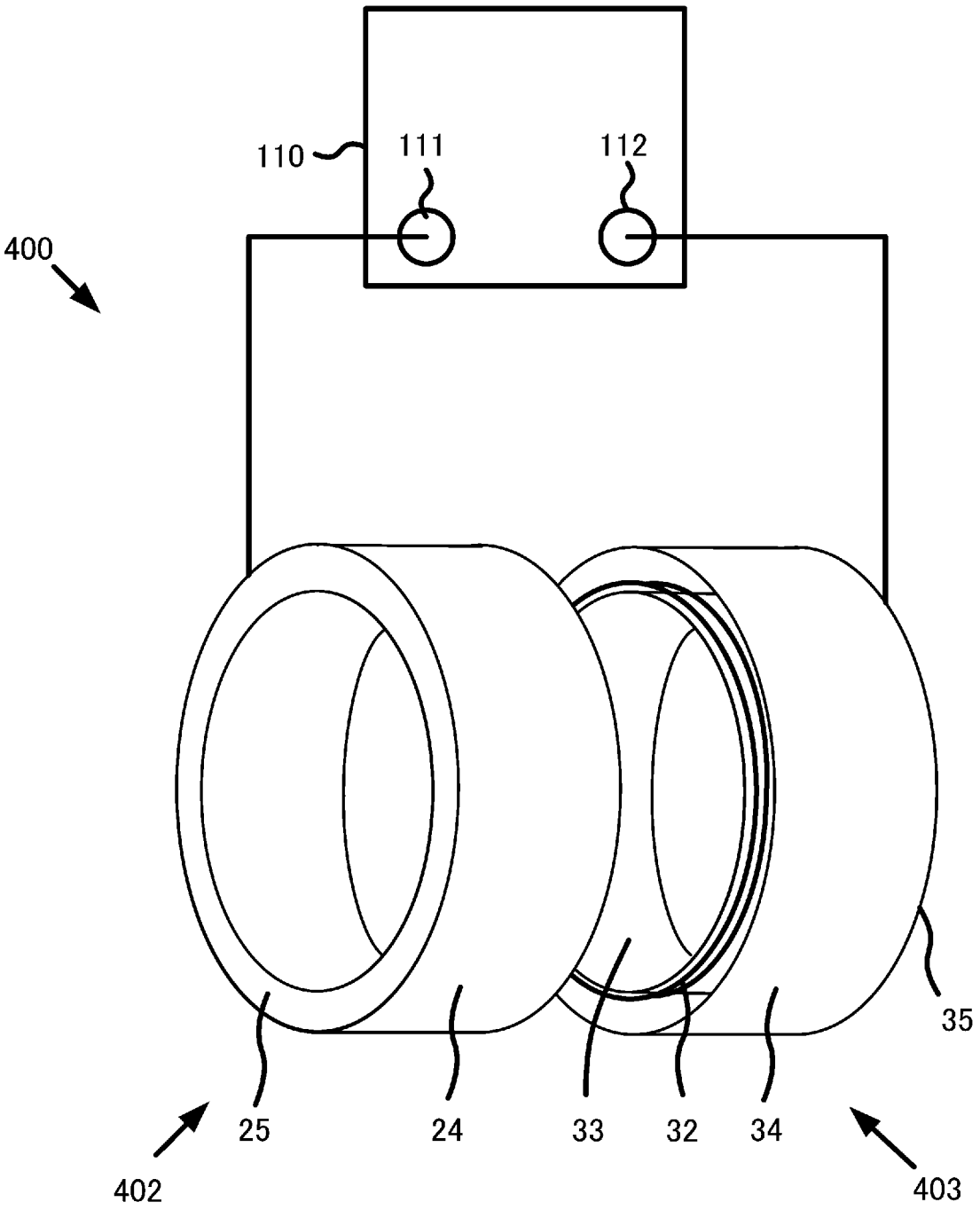
(A) 同相共振モード fL



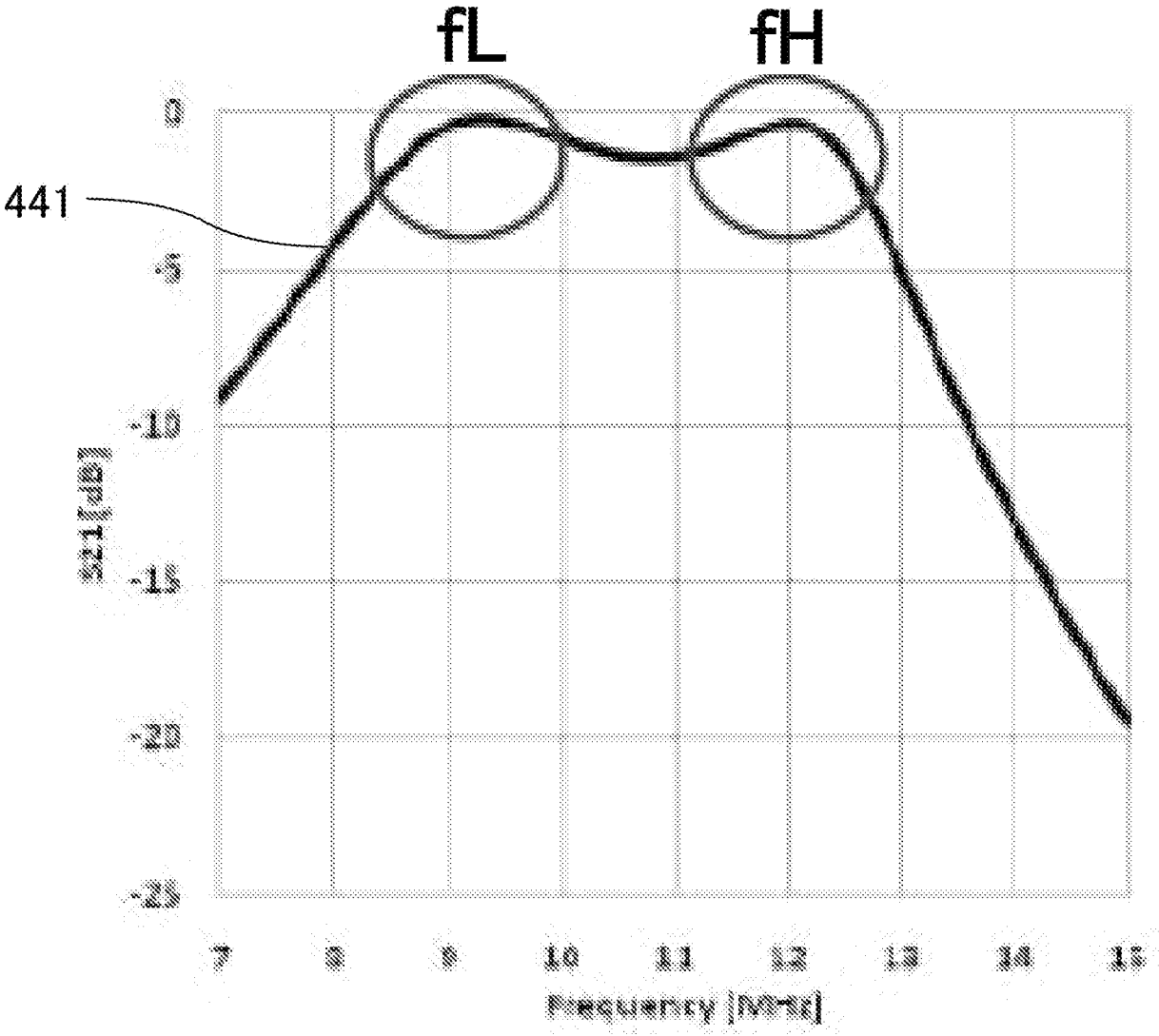
(B) 逆相共振モード fH



[図11]



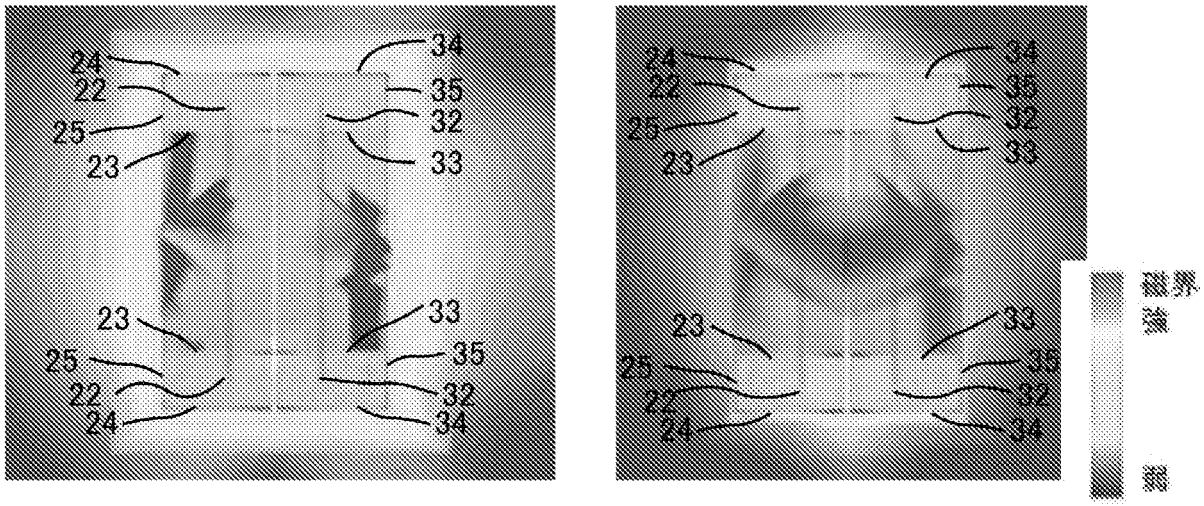
[図12]



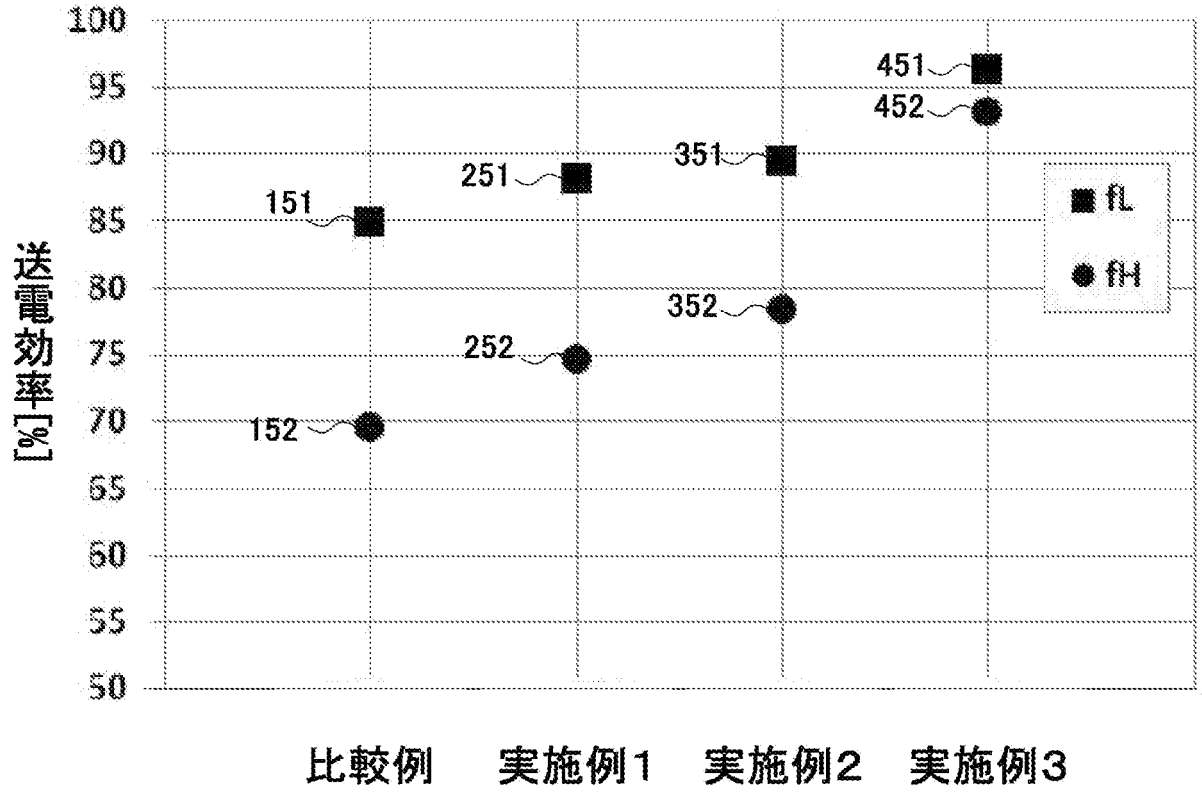
[図13]

(A) 同相共振モード fL

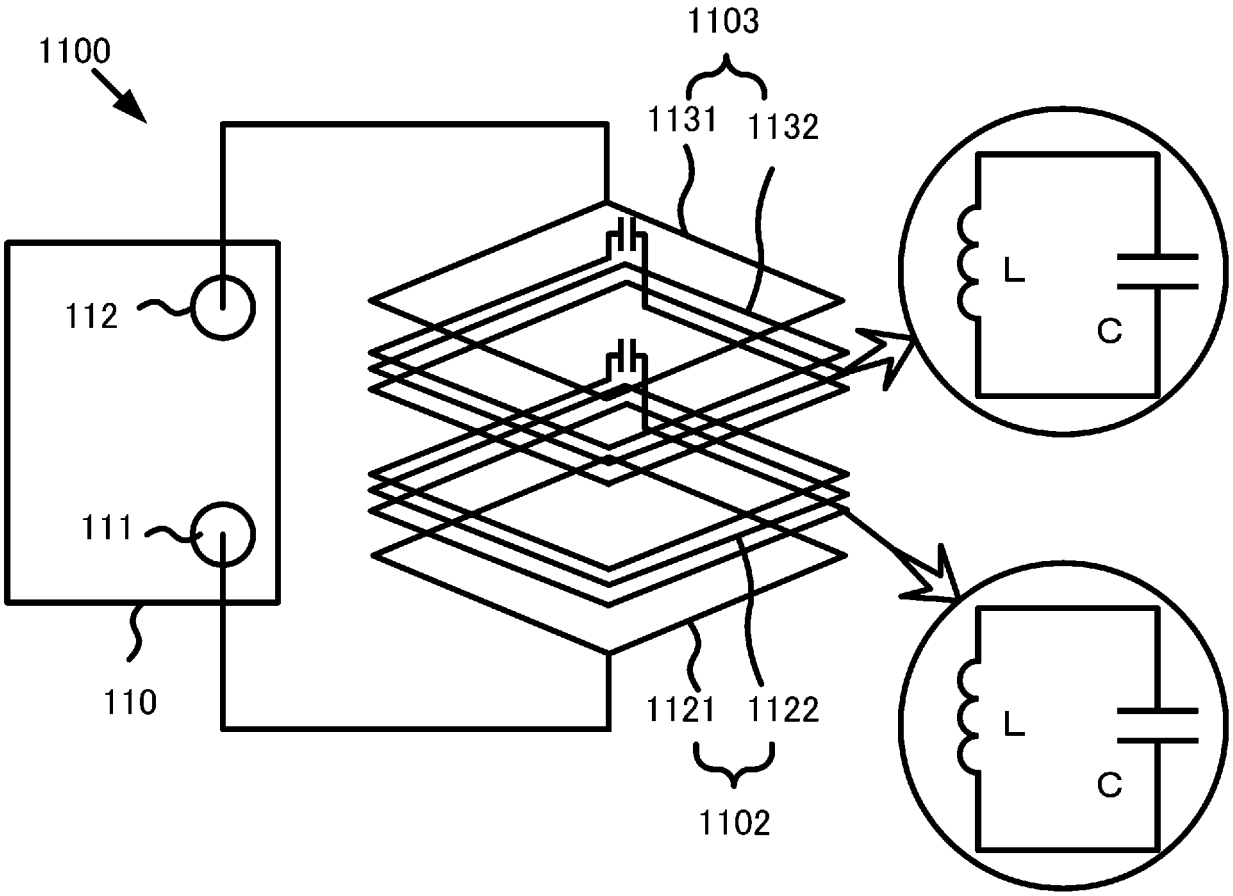
(B) 逆相共振モード fH



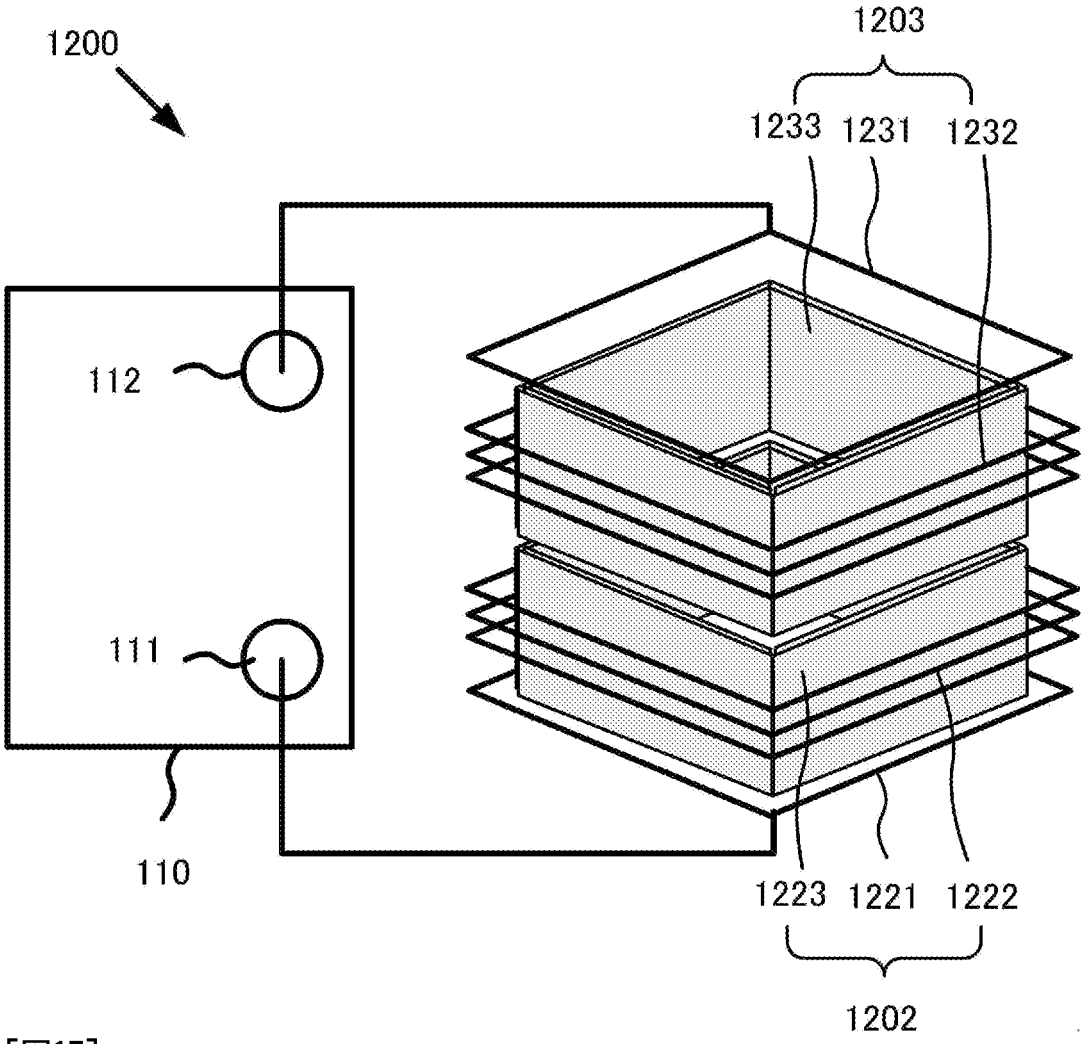
[図14]


100
95
90
85
80
75
70
65
60
55
50
送電効率[%]
451
452
351
251
151
352
252
152
fL
fH
比較例
実施例1
実施例2
実施例3

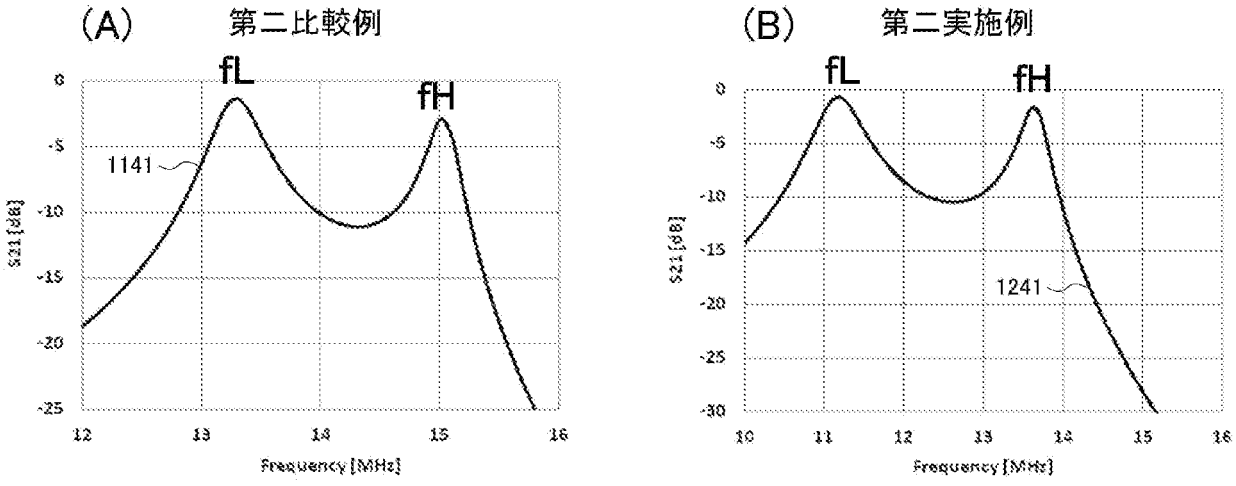
[図15]


1100
1103
1131
1132
112
111
110
1121
1122
1102
L
C
L
C

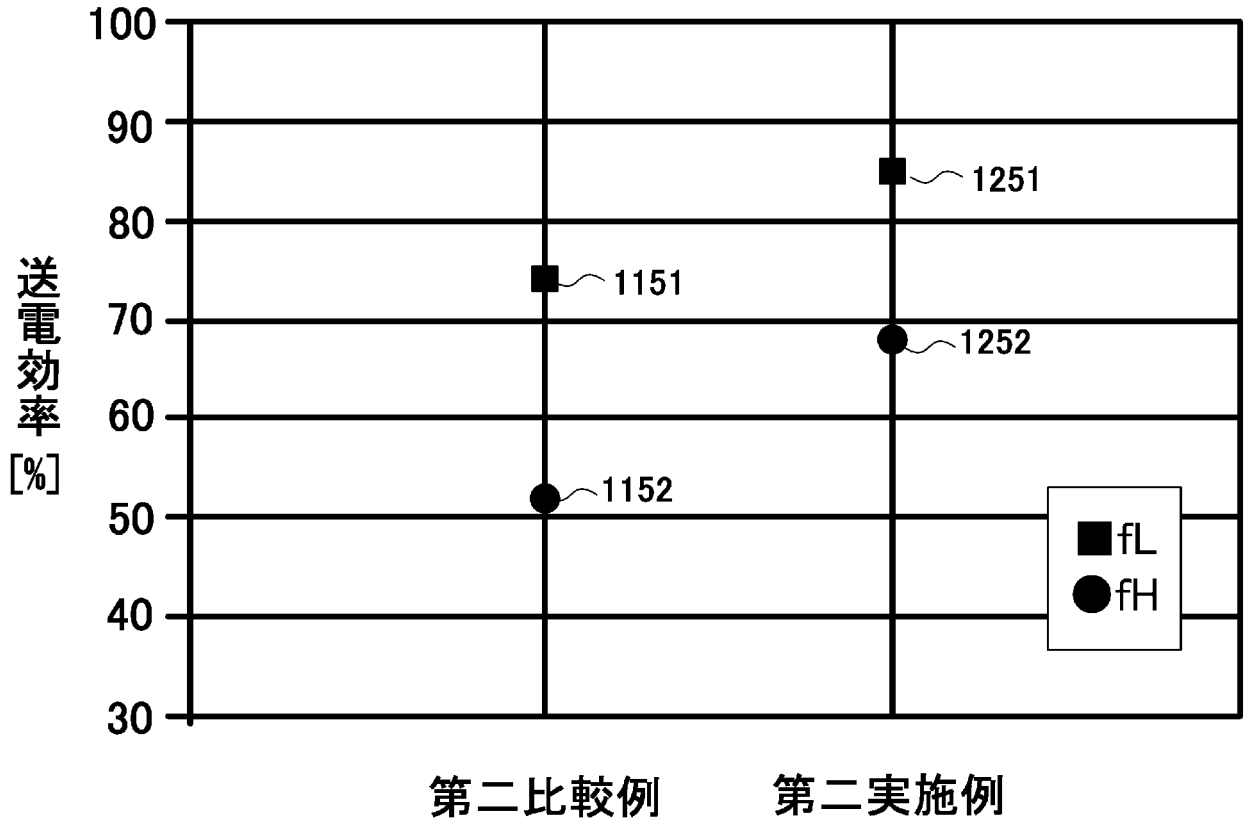
[図16]


1200
1203
1233
1231
1232
112
111
110
1223
1221
1222
1202

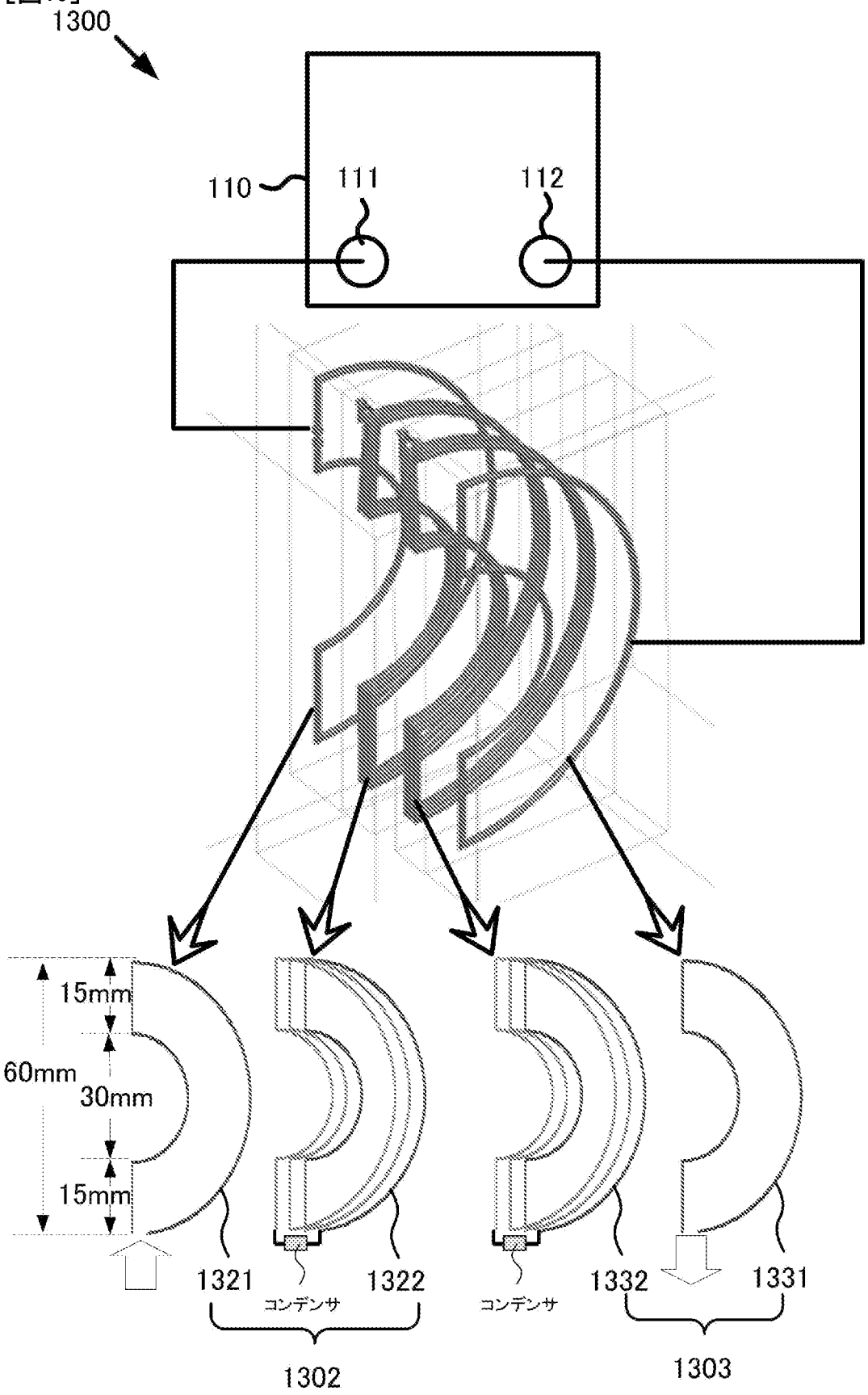
[図17]


(A)
第二比較例
fL
fH
1141
S21[dB]
Frequency [MHz]
(B)
第二実施例
fL
fH
1241
S21[dB]
Frequency [MHz]

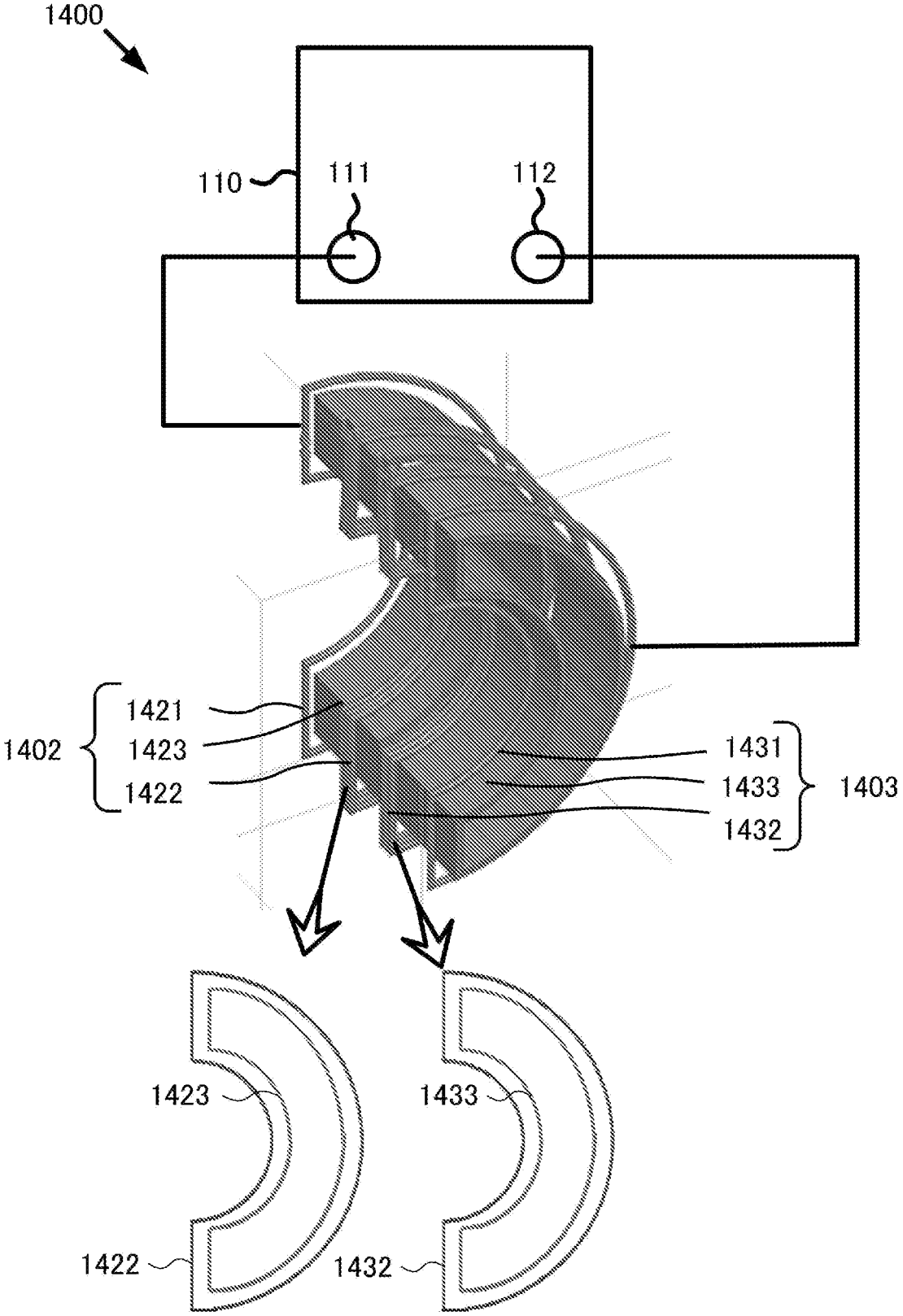
[図18]


100
90
80
70
60
50
40
30
送電効率[%]
1251
1151
1252
1152
fL
fH
第二比較例
第二実施例

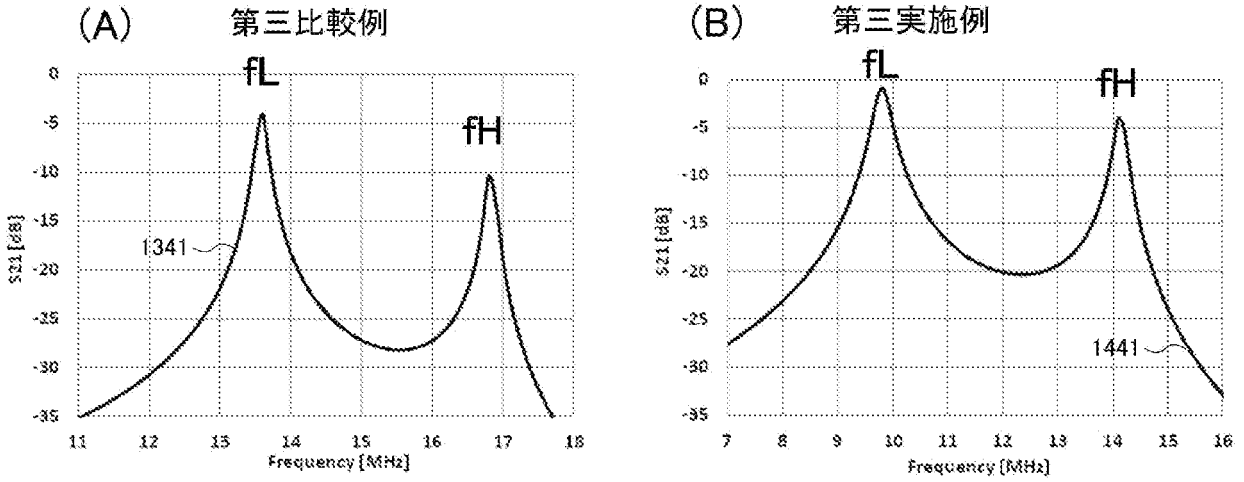
[図19]


1300
110
111
112
15mm
60mm
30mm
15mm
1321
1322
コンデンサ
1302
コンデンサ
1332
1331
1303

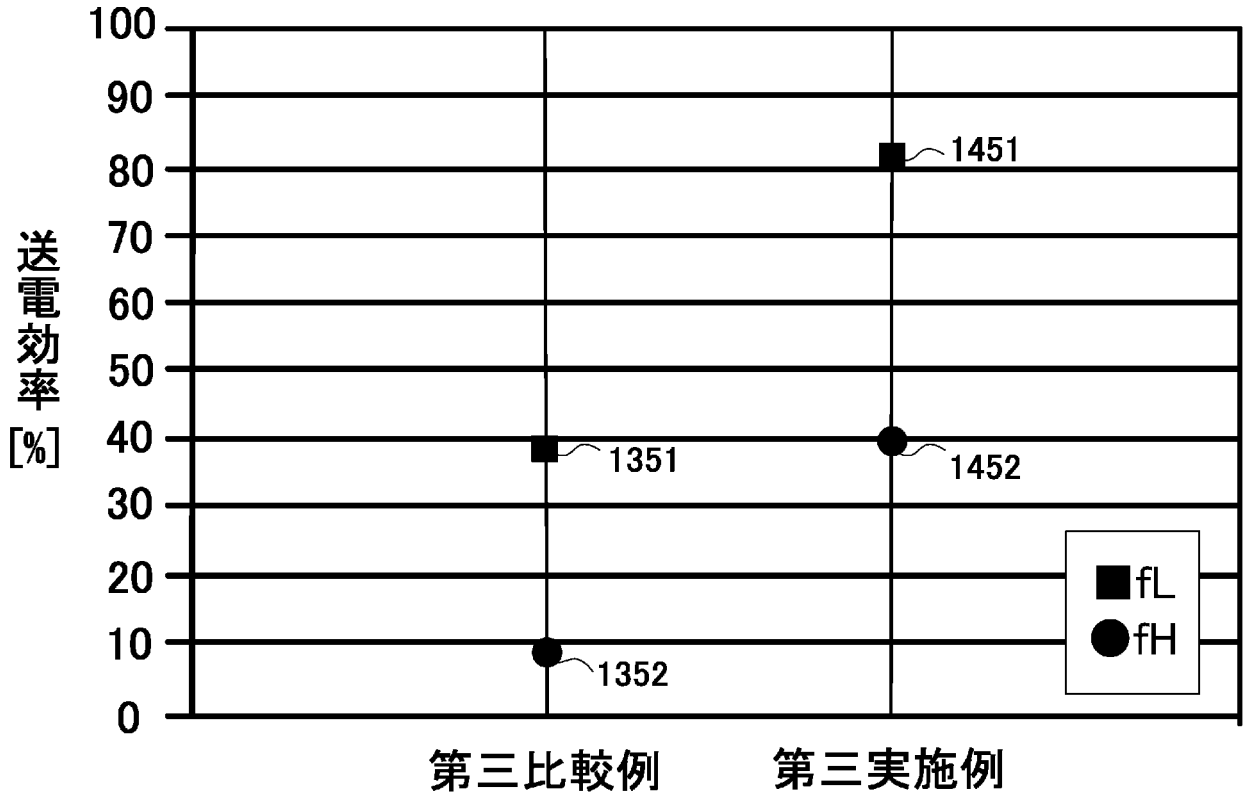
[図20]


1400
110
111
112
1402
1421
1423
1422
1431
1433
1432
1403
1423
1433
1422
1432

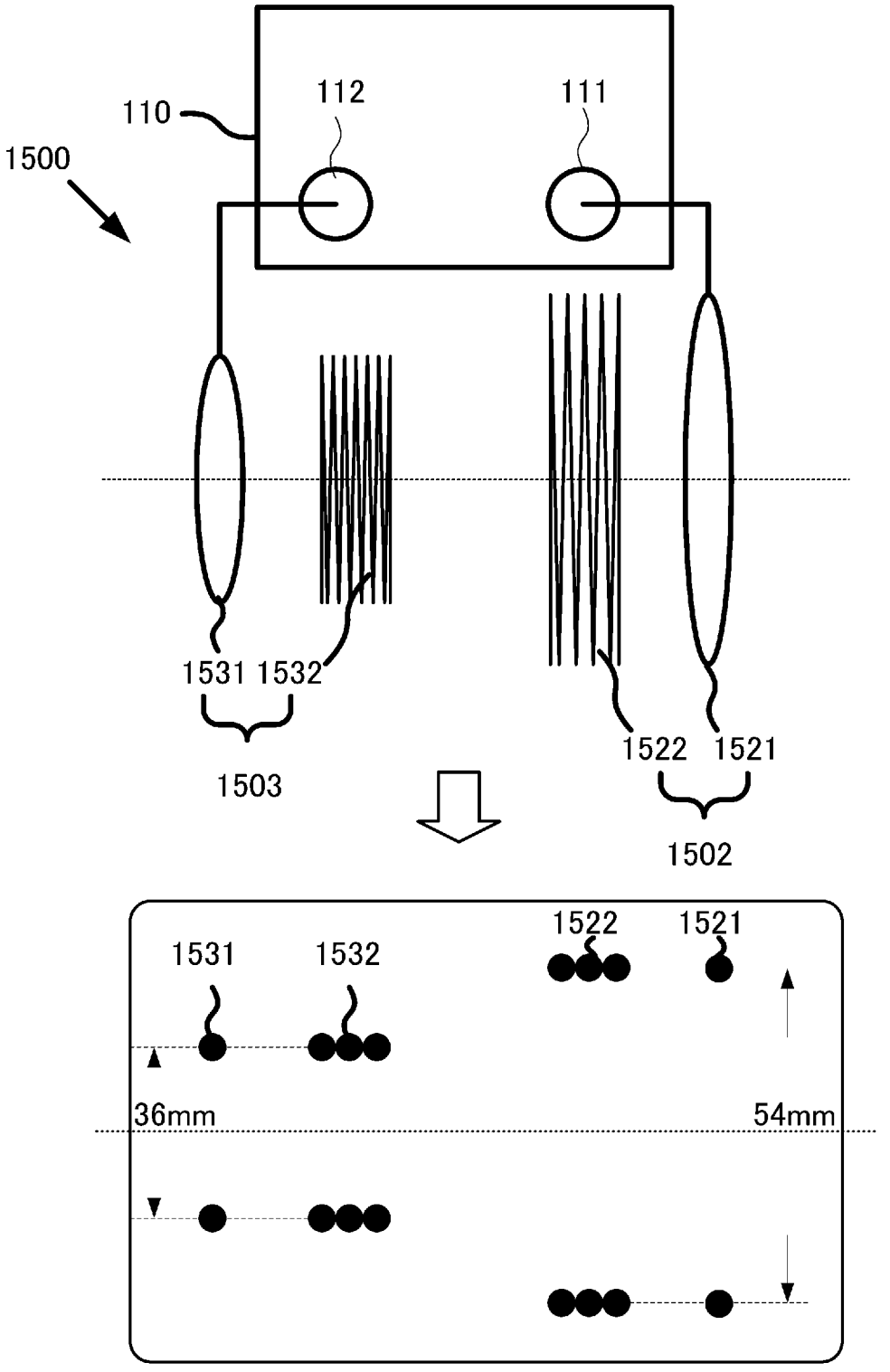
[図21]


(A)
第三比較例
fL
fH
1341
S21 [dB]
Frequency [MHz]
(B)
第三実施例
fL
fH
1441
S21 [dB]
Frequency [MHz]

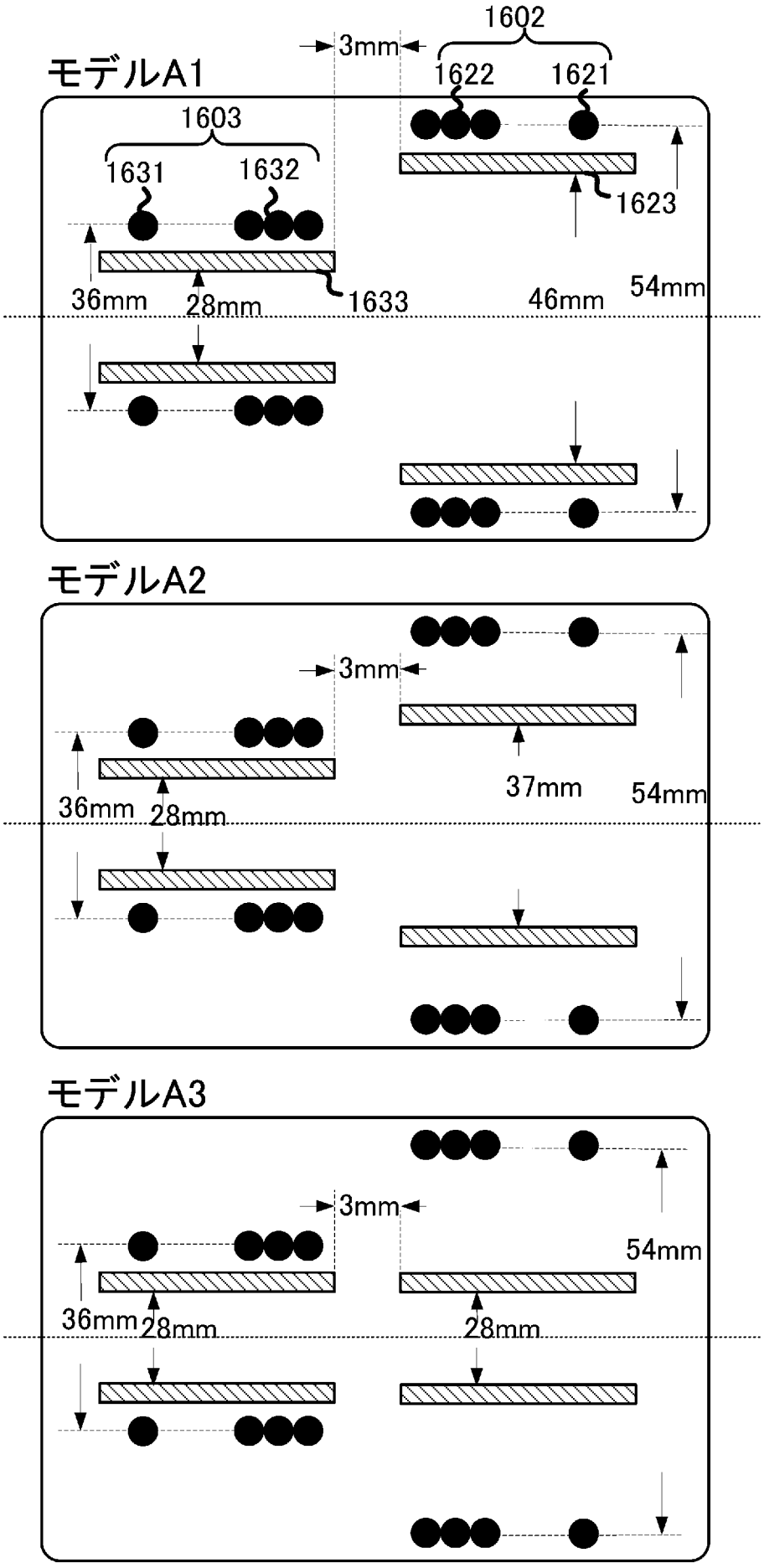
[図22]


送電効率 [%]
100
90
80
70
60
50
40
30
20
10
0
1451
1351
1452
1352
fL
fH
第三比較例
第三実施例

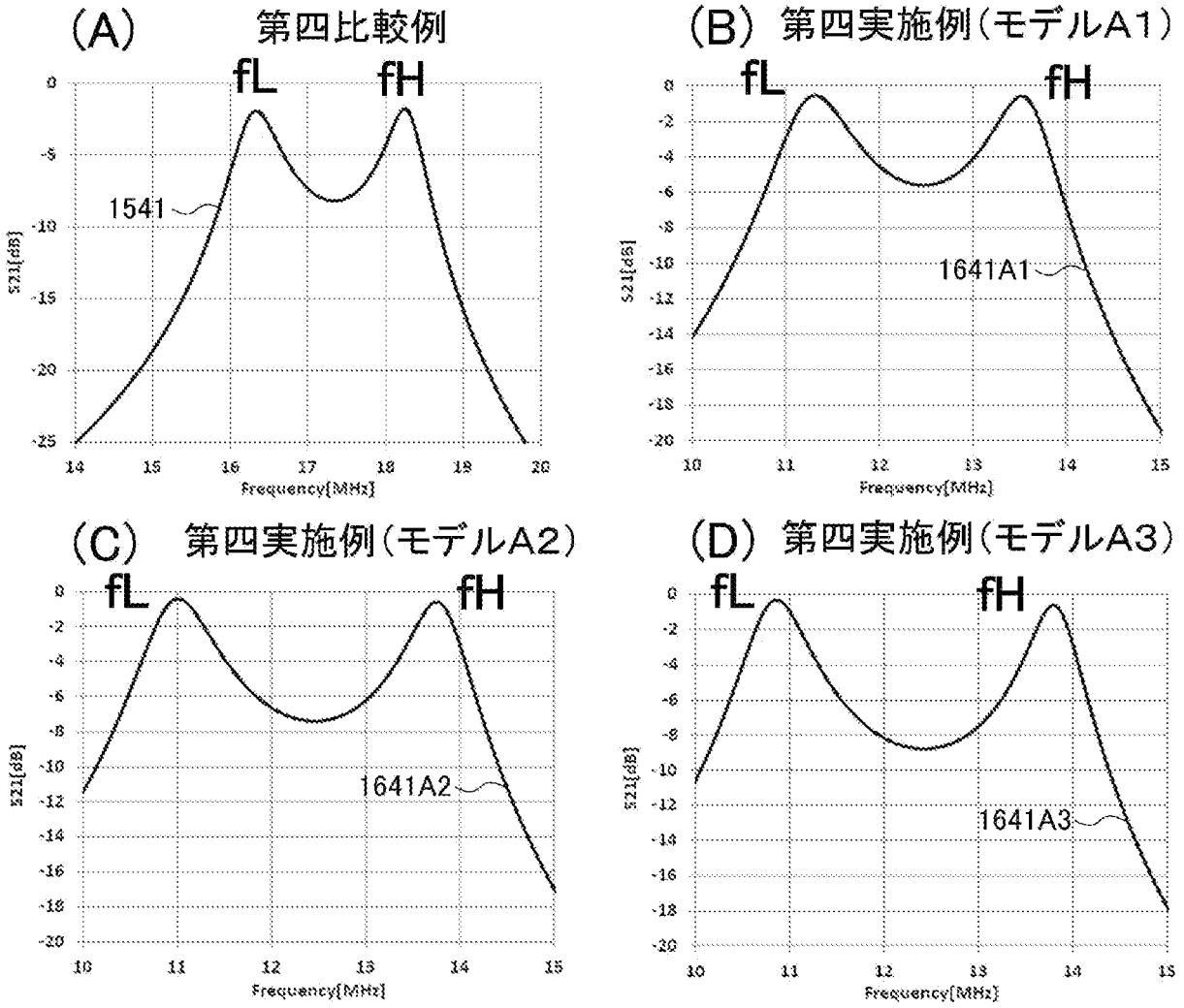
[図23]


110
112
111
1500
1531
1532
1503
1522
1521
1502
1531
1532
1522
1521
36mm
54mm

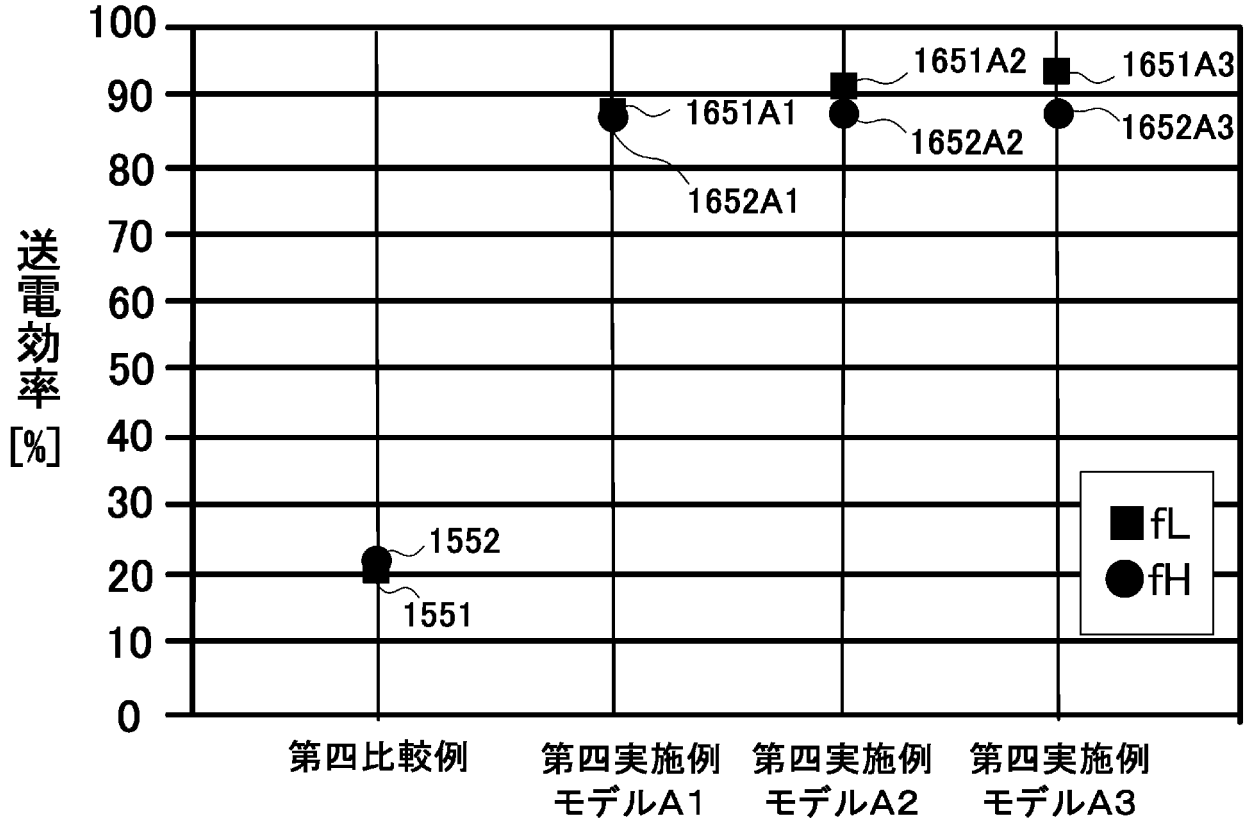
[図24]


モデルA1
1602
3mm
1622
1621
1603
1631
1632
1623
36mm
28mm
1633
46mm
54mm
モデルA2
3mm
37mm
54mm
36mm
28mm
モデルA3
3mm
54mm
36mm
28mm
28mm

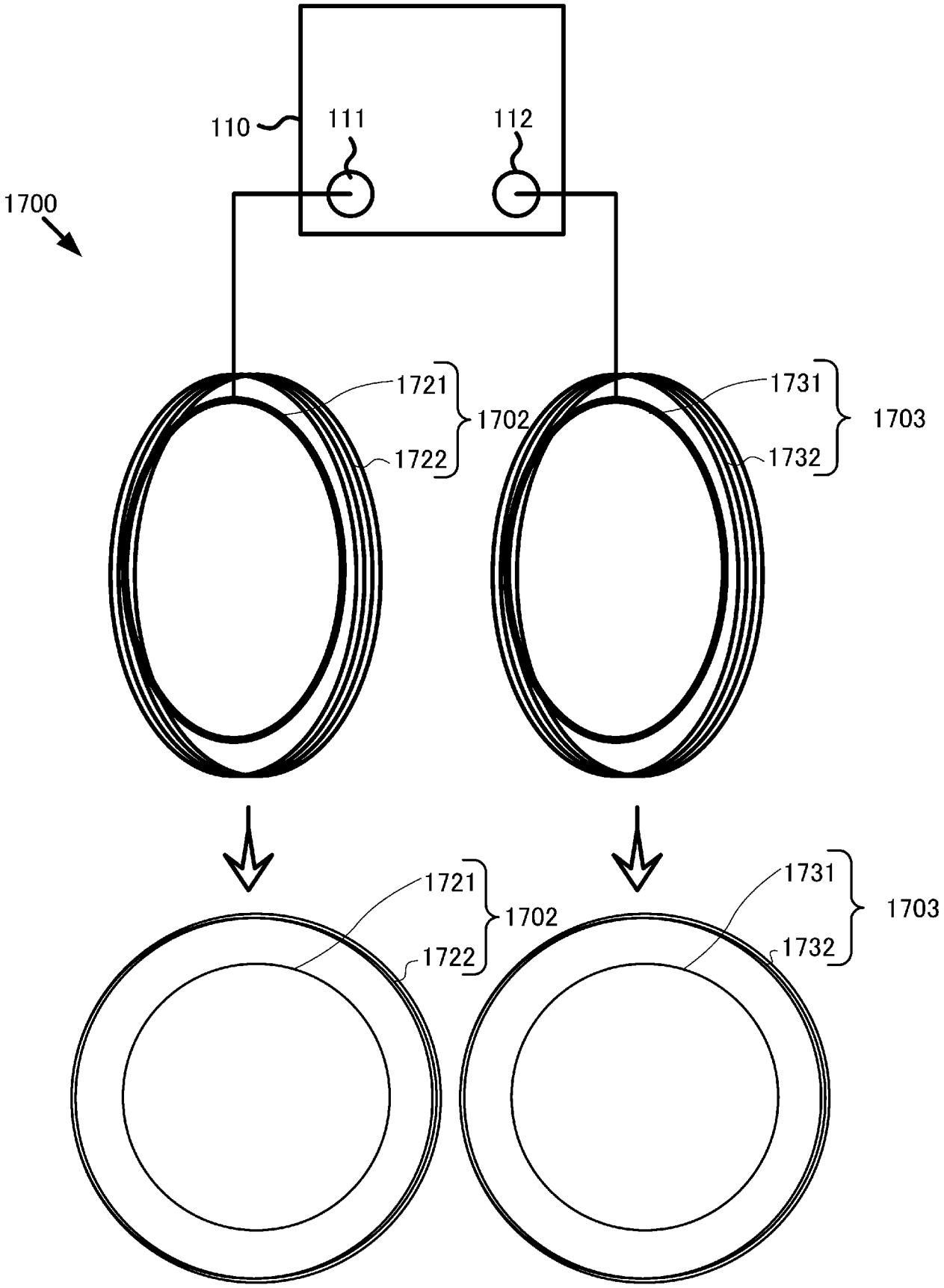
[図25]


(A) 第四比較例
fL
fH
1541
S21[dB]
Frequency[MHz]
(B) 第四実施例(モデルA1)
1641A1
(C) 第四実施例(モデルA2)
1641A2
(D) 第四実施例(モデルA3)
1641A3

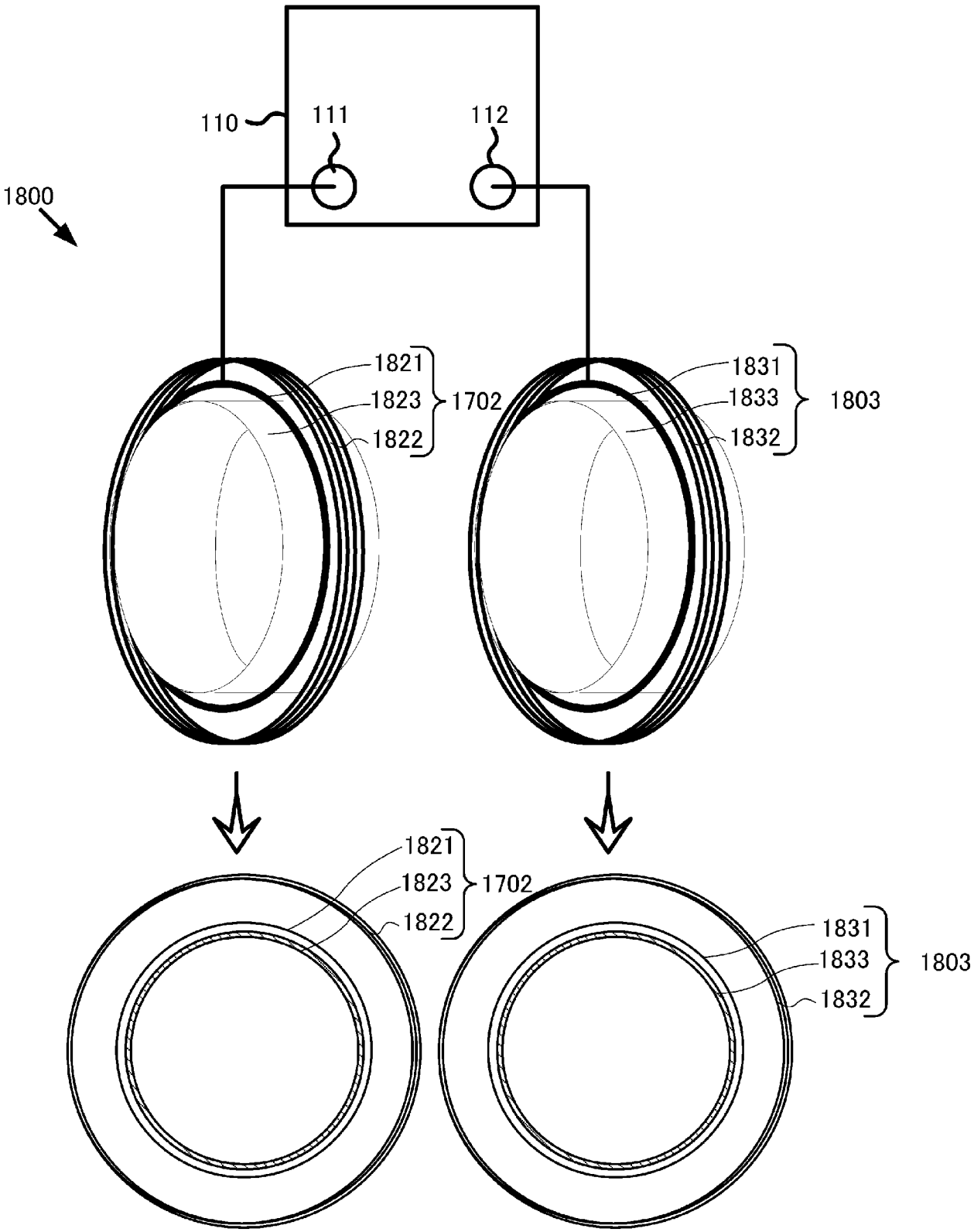
[図26]


送電効率[%]
100
90
80
70
60
50
40
30
20
10
0
1651A2
1651A3
1651A1
1652A2
1652A3
1652A1
1552
1551
fL
fH
第四比較例
第四実施例 モデルA1
第四実施例 モデルA2
第四実施例 モデルA3

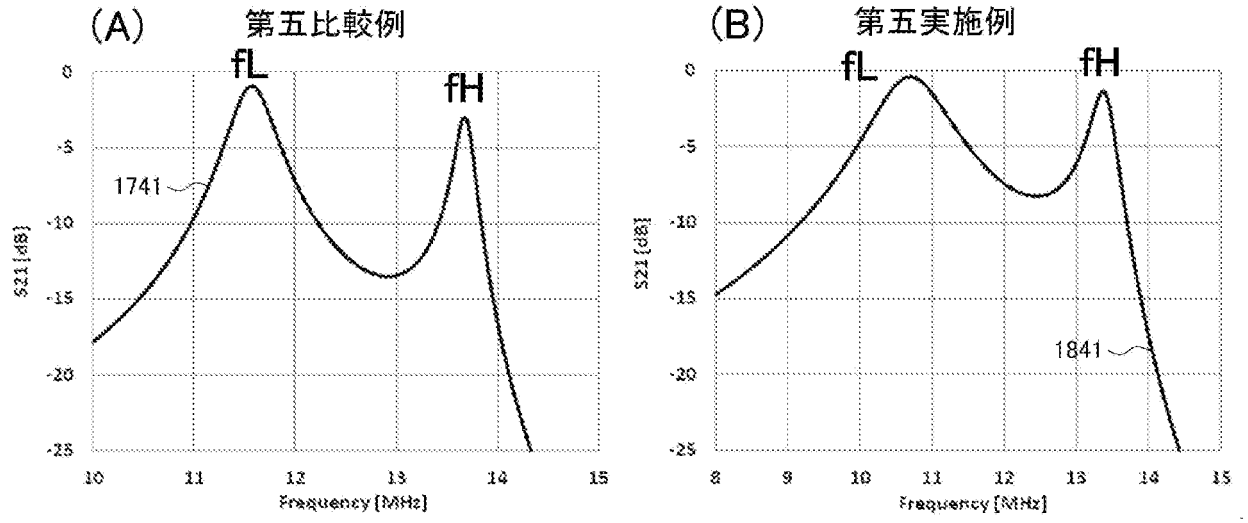
[図27]


110
111
112
1700
1721
1722
1702
1731
1732
1703
1721
1722
1702
1731
1732
1703

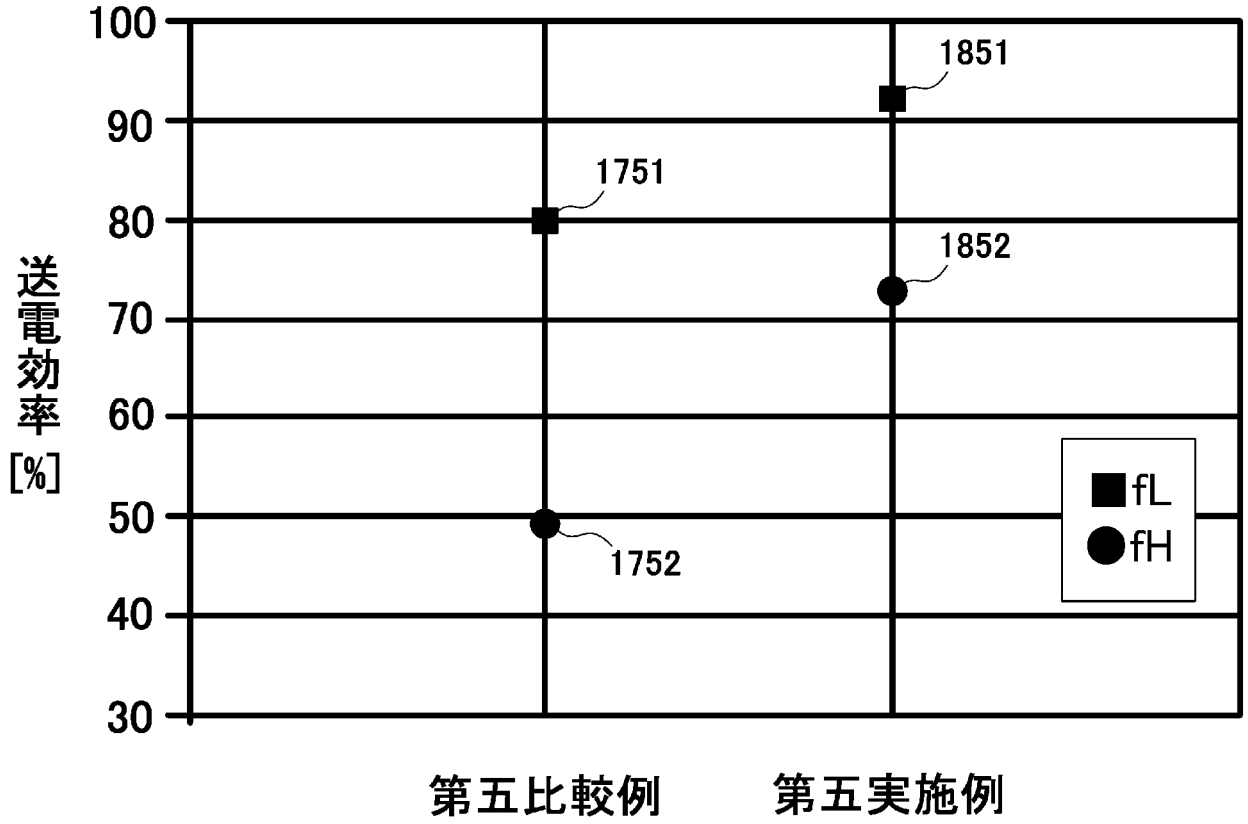
[図28]


110
111
112
1800
1821
1823
1822
1702
1831
1833
1832
1803
1821
1823
1822
1702
1831
1833
1832
1803

[図29]


(A)
第五比較例
fL
fH
1741
S21[dB]
Frequency[MHz]
(B)
第五実施例
fL
fH
1841
S21[dB]
Frequency[MHz]

[図30]


送電効率[%]
100
90
80
70
60
50
40
30
1851
1751
1852
1752
fL
fH
第五比較例
第五実施例