FIG. 1

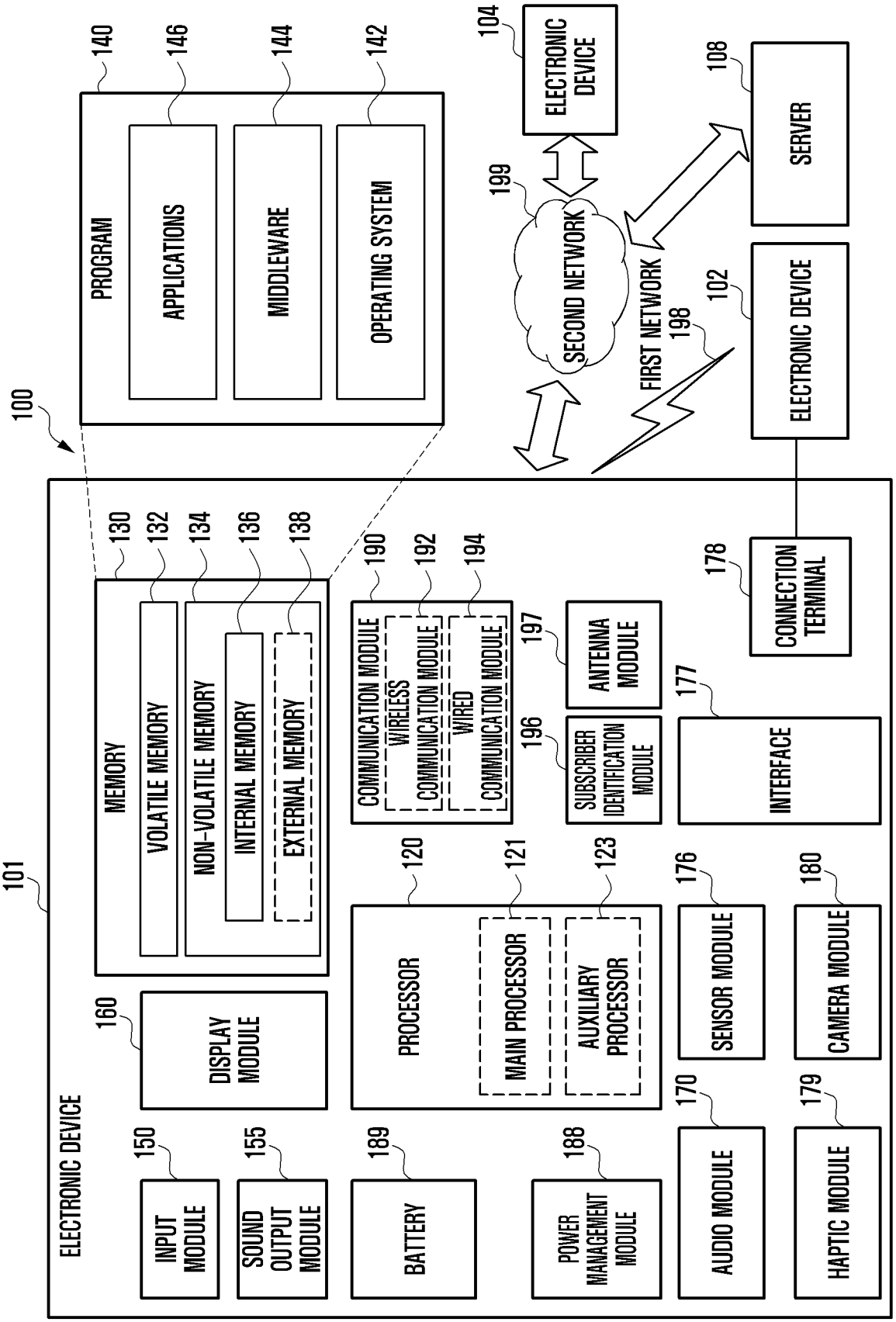

ELECTRONIC DEVICE
101
100
PROGRAM
140
APPLICATIONS
146
MIDDLEWARE
144
OPERATING SYSTEM
142
MEMORY
130
VOLATILE MEMORY
132
NON-VOLATILE MEMORY
134
INTERNAL MEMORY
136
EXTERNAL MEMORY
138
DISPLAY MODULE
160
INPUT MODULE
150
SOUND OUTPUT MODULE
155
PROCESSOR
120
MAIN PROCESSOR
121
AUXILIARY PROCESSOR
123
BATTERY
189
POWER MANAGEMENT MODULE
188
COMMUNICATION MODULE
190
WIRELESS COMMUNICATION MODULE
192
WIRED COMMUNICATION MODULE
194
SUBSCRIBER IDENTIFICATION MODULE
196
ANTENNA MODULE
197
SENSOR MODULE
176
AUDIO MODULE
170
INTERFACE
177
CAMERA MODULE
180
HAPTIC MODULE
179
CONNECTION TERMINAL
178
ELECTRONIC DEVICE
104
SECOND NETWORK
199
FIRST NETWORK
198
ELECTRONIC DEVICE
102
SERVER
108

FIG. 2

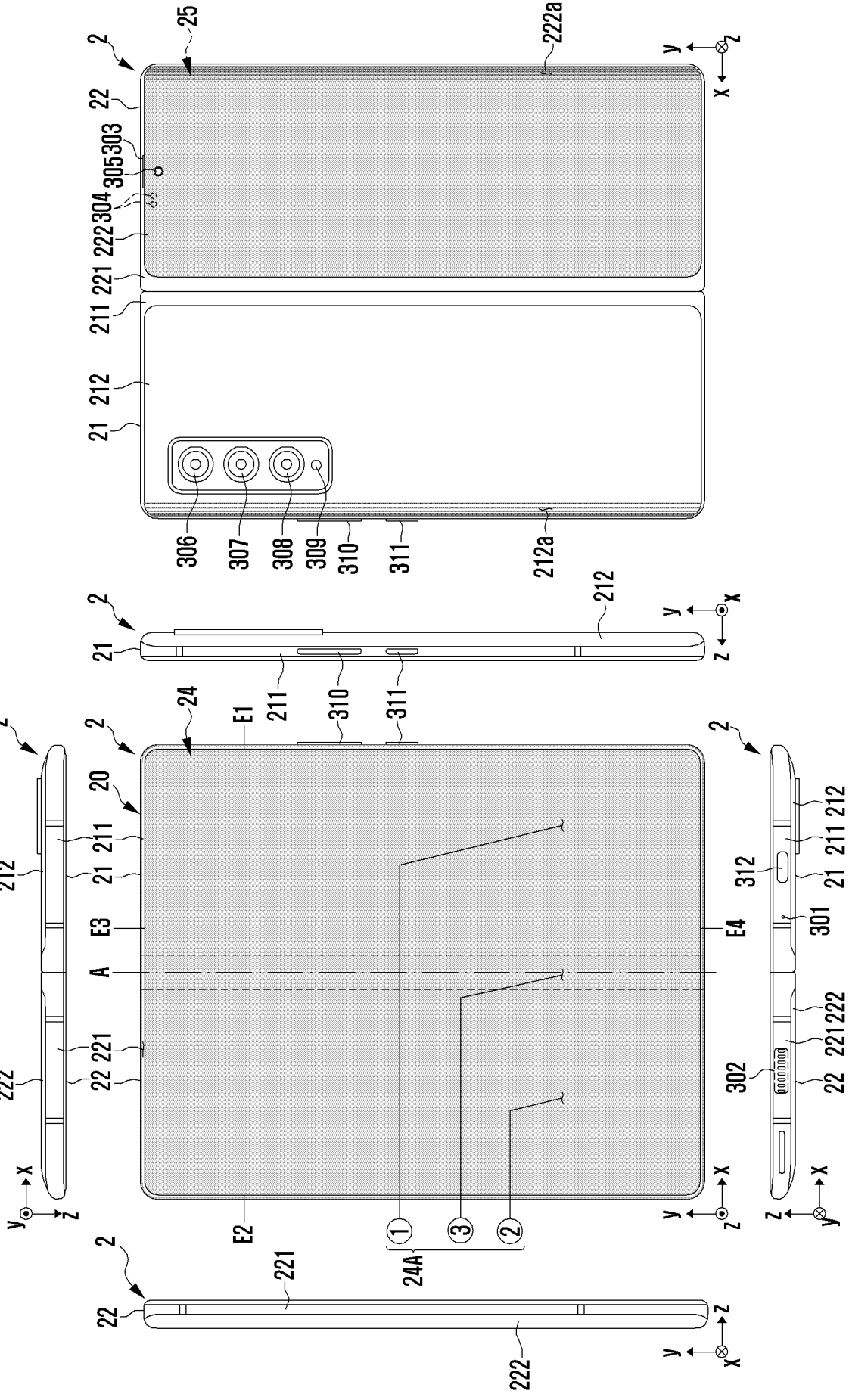

2
25
222a
22
303
305
304
222
221
211
212
21
306
307
308
309
310
311
212a
E1
E2
E3
E4
A
20
24
24A
312
301
302
1
2
3
x
y
z

FIG. 3

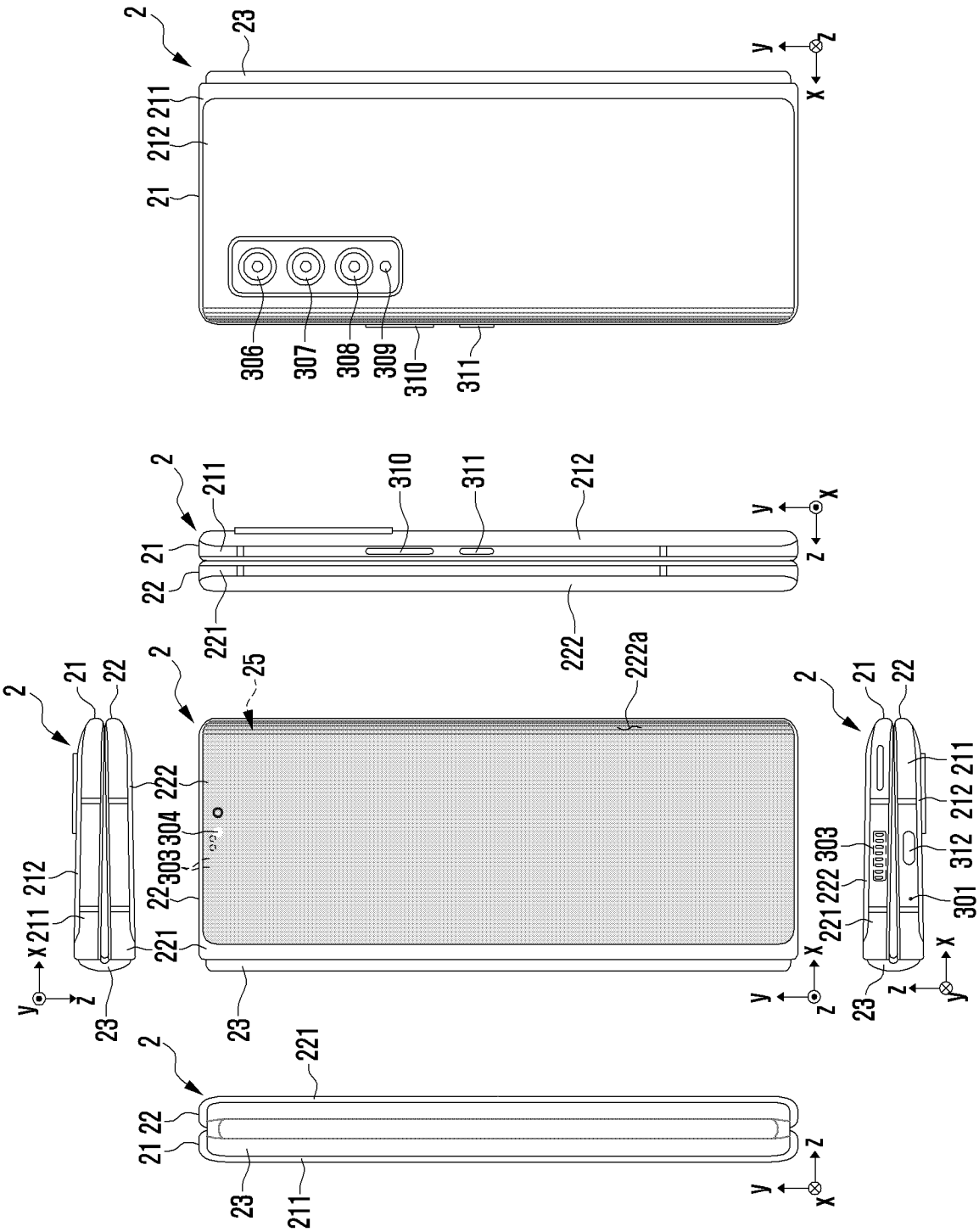

2
23
211
212
21
306
307
308
309
310
311
y
z
x
22
221
222
222a
25
303
304
312
301

FIG. 4

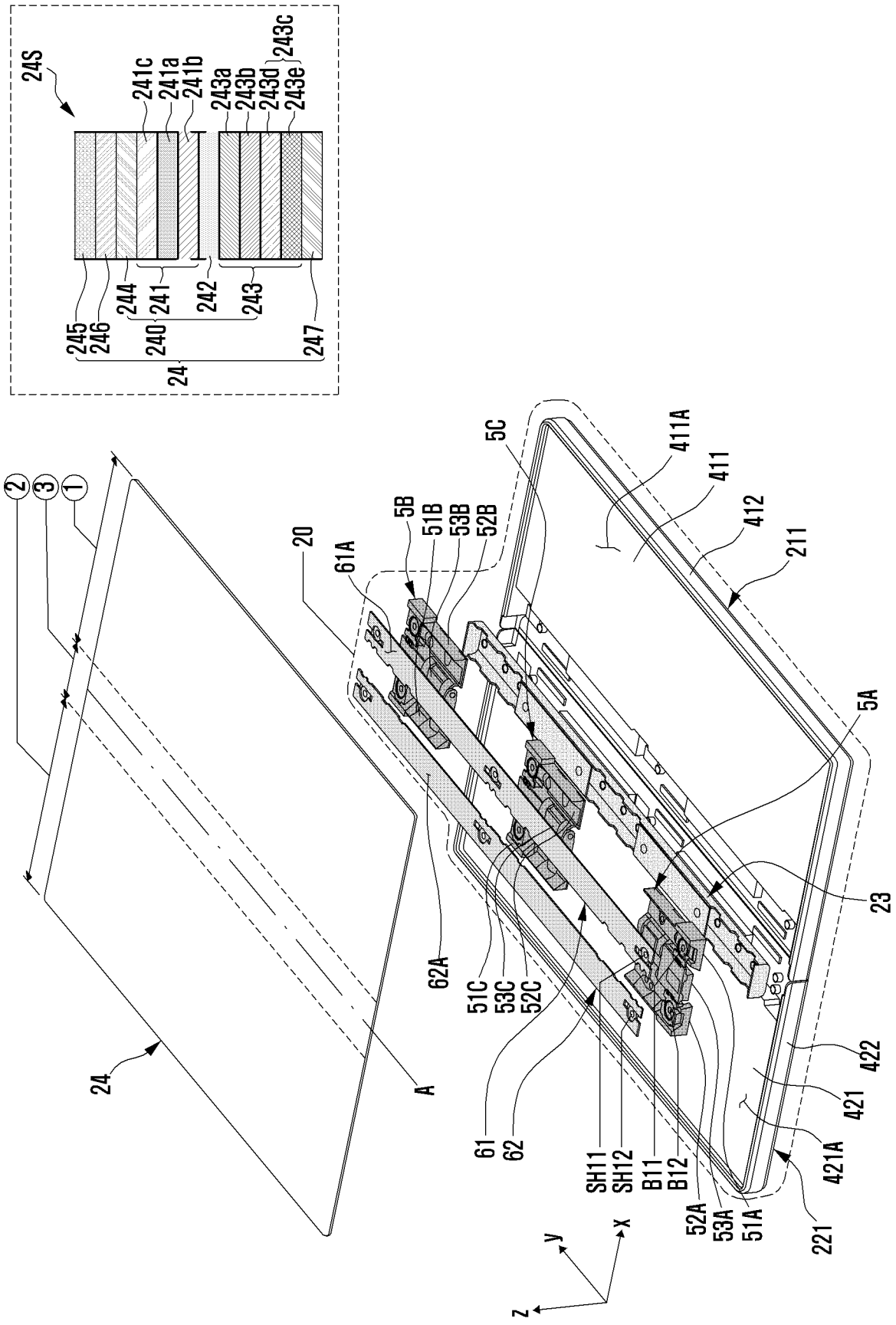

24S
241c
241a
241b
243a
243b
243d
243e
243c
245
246
244
241
242
243
240
247
24
2
3
1
20
61A
5B
51B
53B
52B
5C
411A
411
412
211
5A
23
24
A
62A
51C
53C
52C
61
62
SH11
SH12
B11
B12
52A
53A
51A
221
421A
421
422
y
x
z

FIG. 5

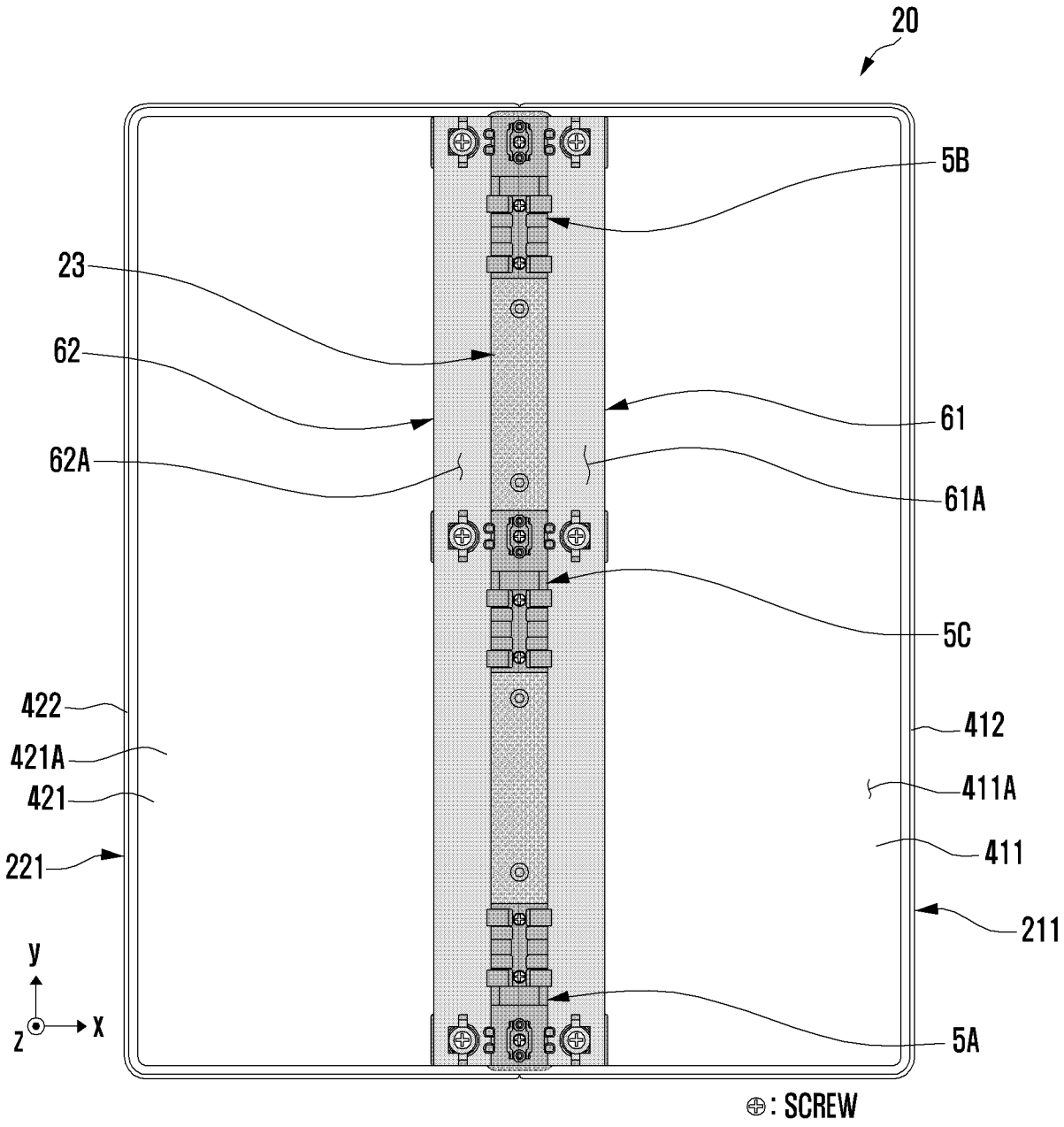

20
5B
23
62
61
62A
61A
5C
422
412
421A
411A
421
411
221
211
y
z
x
5A
⊕: SCREW

FIG. 6

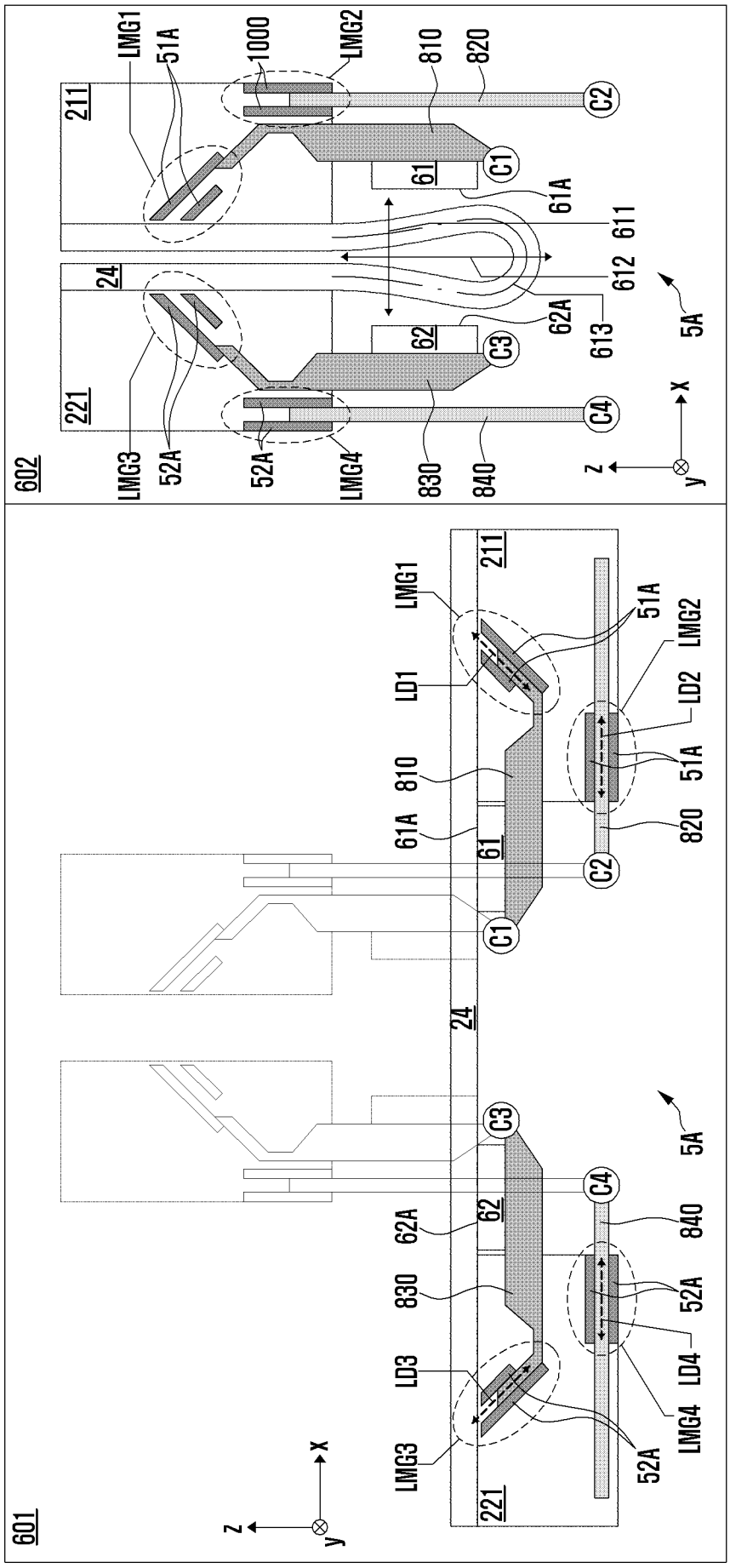

601
602
211
221
24
LMG1
LMG2
LMG3
LMG4
LD1
LD2
LD3
LD4
51A
52A
61
62
61A
62A
810
820
830
840
1000
611
612
613
C1
C2
C3
C4
5A
x
y
z

FIG. 7

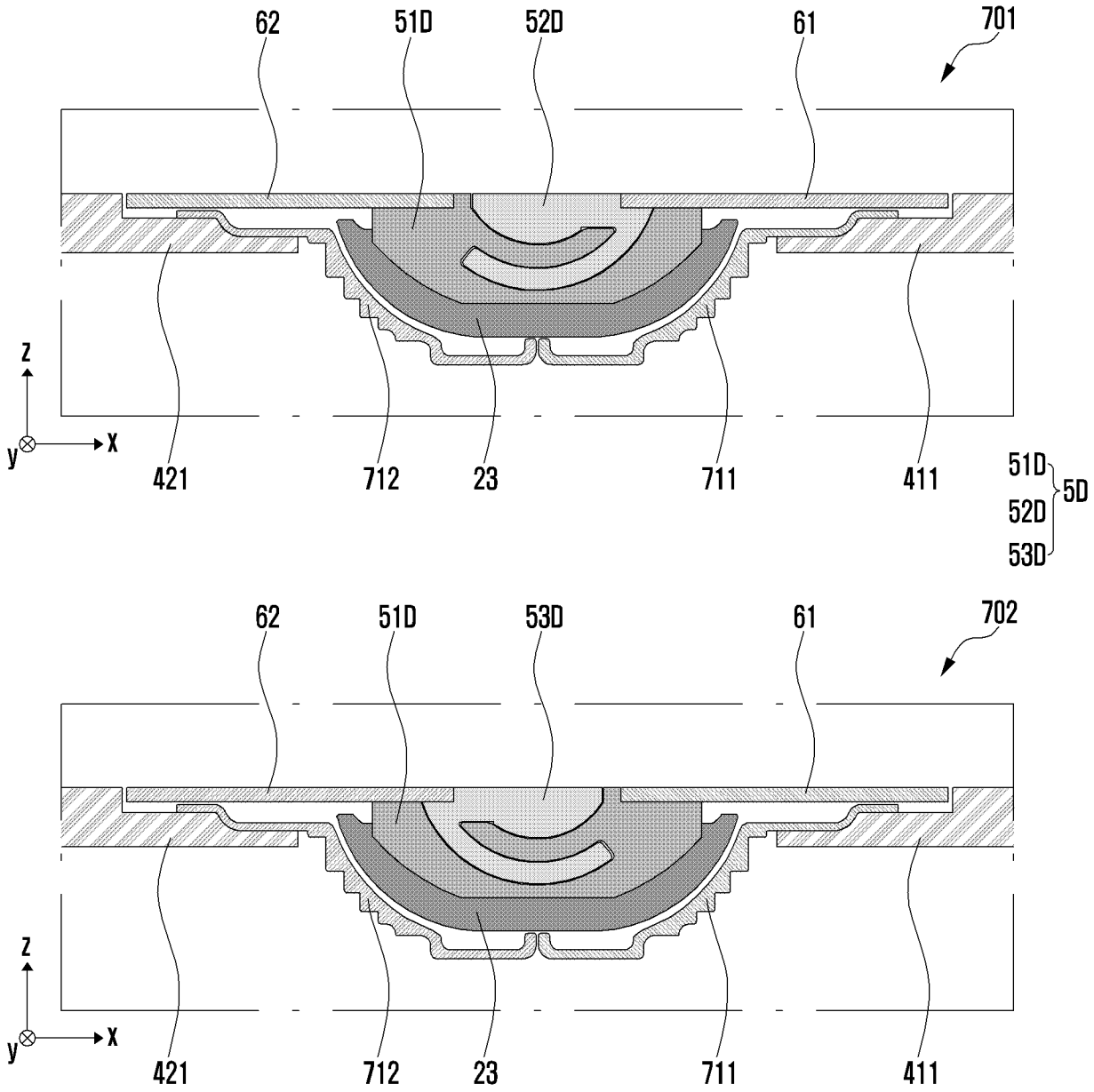

62
51D
52D
61
701
z
y
x
421
712
23
711
411
51D
52D
53D
5D
62
51D
53D
61
702
z
y
x
421
712
23
711
411

FIG. 8

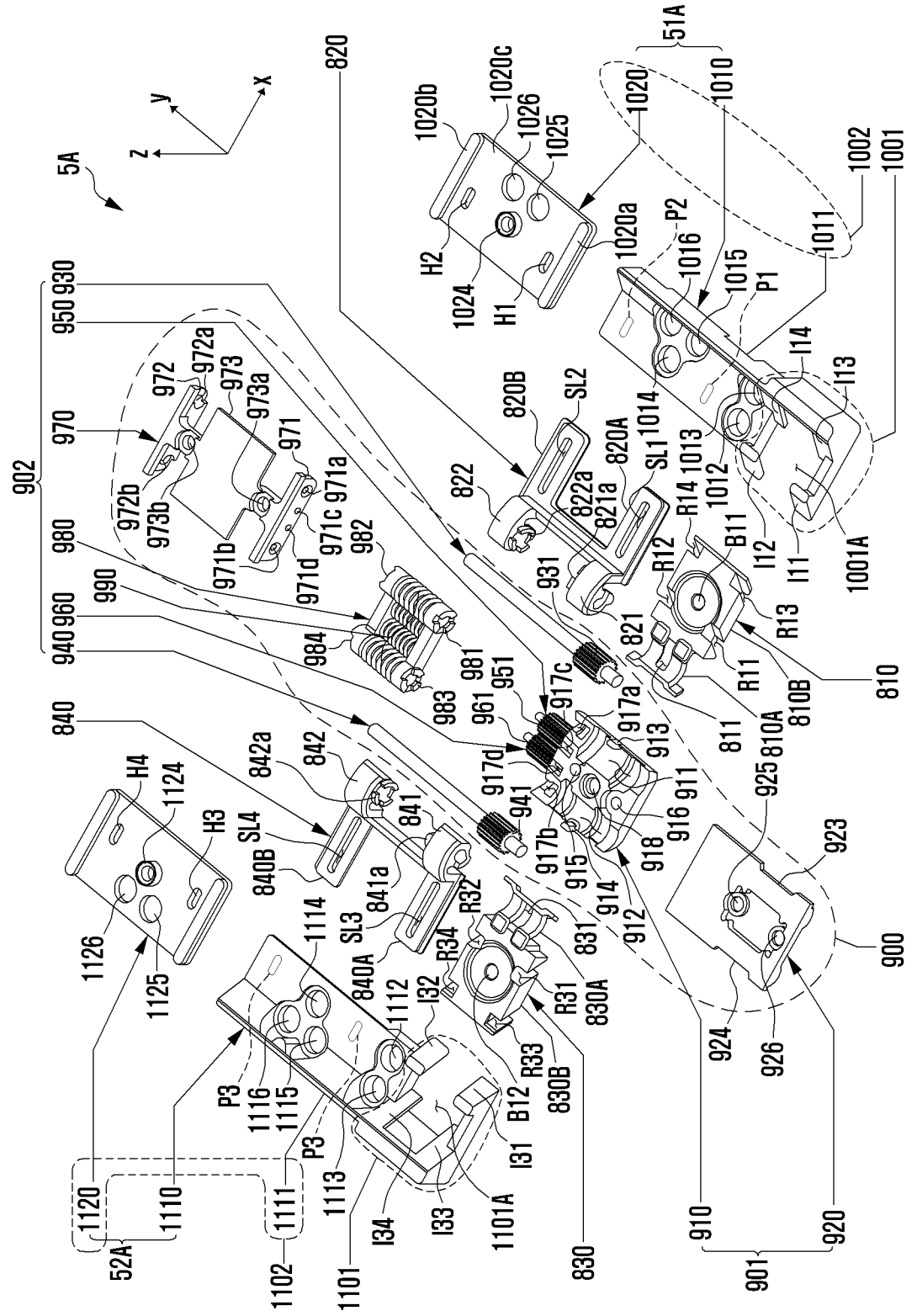

5A
x
y
z
51A
1020
1010
1002
1001
1011
1020a
1020b
1020c
1026
1025
1024
H1
H2
P1
P2
1016
1015
1014
1013
1012
I11
I12
I13
I14
1001A
820
820A
820B
SL1
SL2
822
822a
821a
R14
R12
B11
R13
R11
810
810A
810B
811
821
931
902
930
950
970
972
972a
972b
973
973a
973b
971
971a
971b
971c
971d
980
982
990
960
940
984
981
983
951
961
917c
917a
917d
913
911
916
918
941
917b
915
914
912
925
923
924
926
900
910
920
901
840
842
842a
841
841a
840B
SL4
SL3
840A
R32
R34
R31
830A
830B
R33
B12
831
830
H4
1124
H3
1126
1125
1114
1112
I32
1116
1115
P3
1113
1101
1101A
I31
I33
I34
1120
1110
1111
1102
52A

FIG. 9

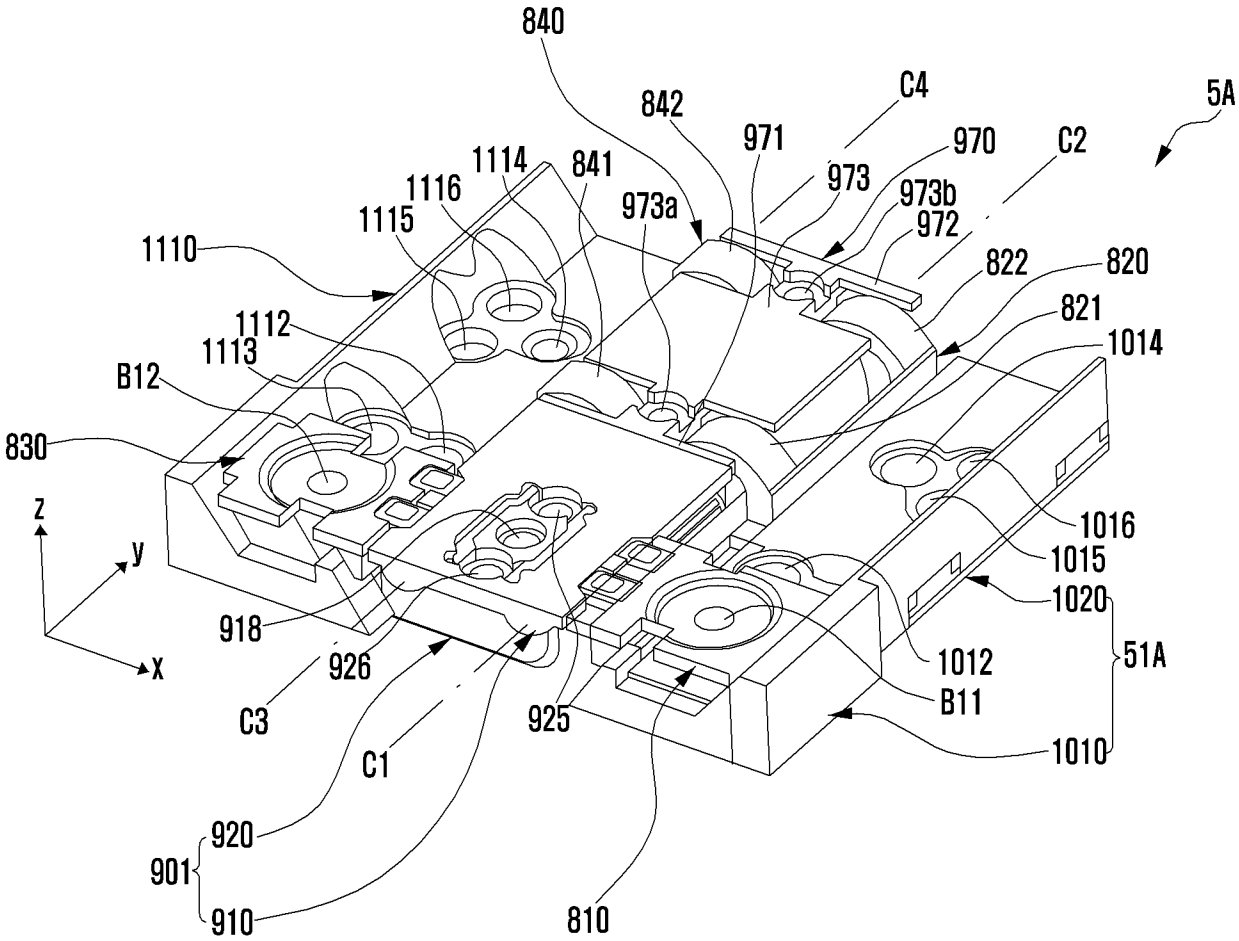

840
842
C4
5A
971
970
C2
1114
841
973
973b
1116
1115
973a
972
1110
822
820
1112
821
1113
1014
B12
830
1016
z
y
1015
1020
x
918
926
1012
51A
C3
925
B11
C1
1010
920
901
910
810

FIG. 10

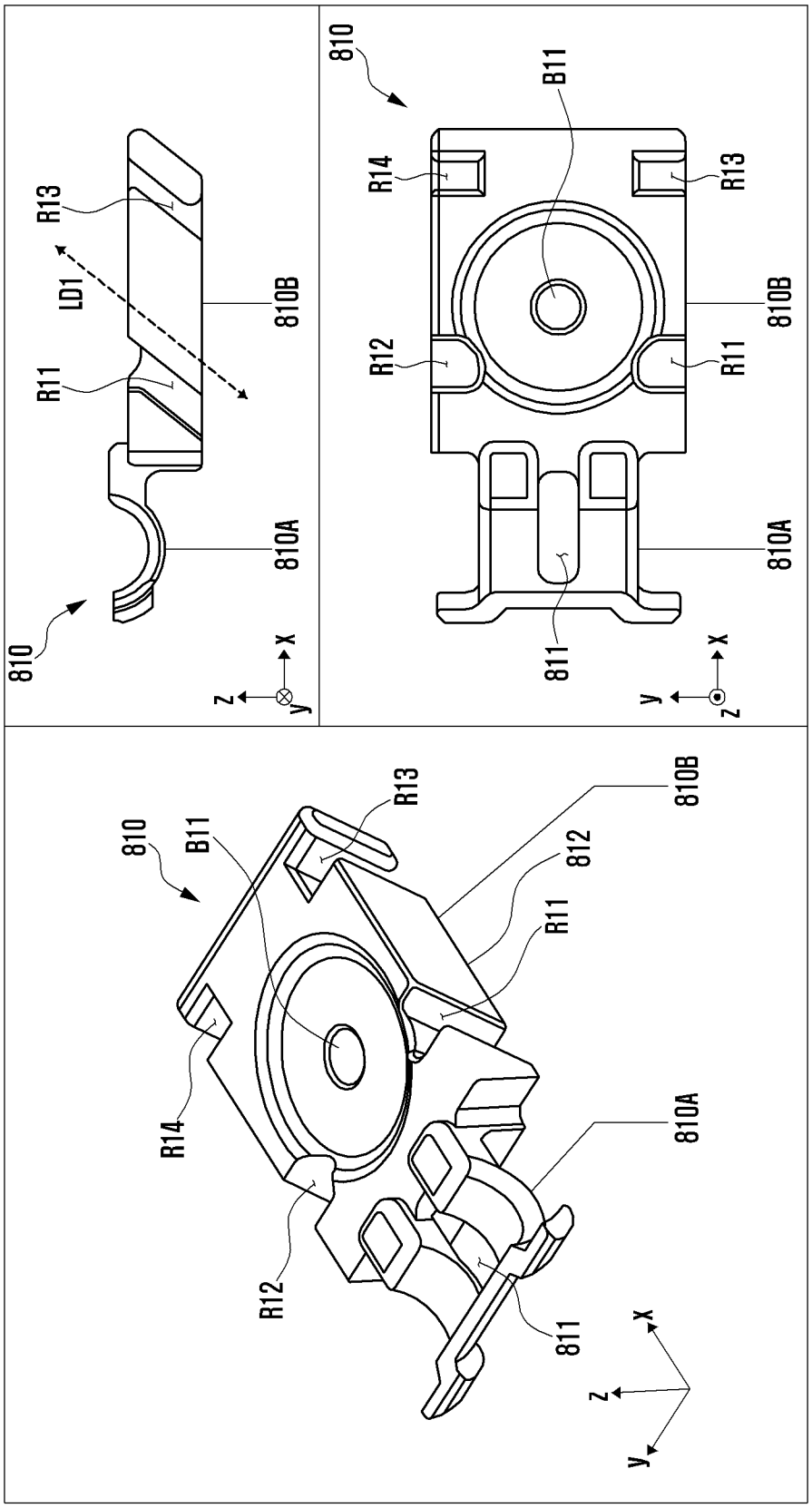

810
R13
LD1
810B
R11
810A
x
z
y
810
B11
R14
R13
R12
R11
810B
810A
811
x
y
z
810
B11
R13
812
810B
R11
R14
810A
R12
811
x
z
y

FIG. 11

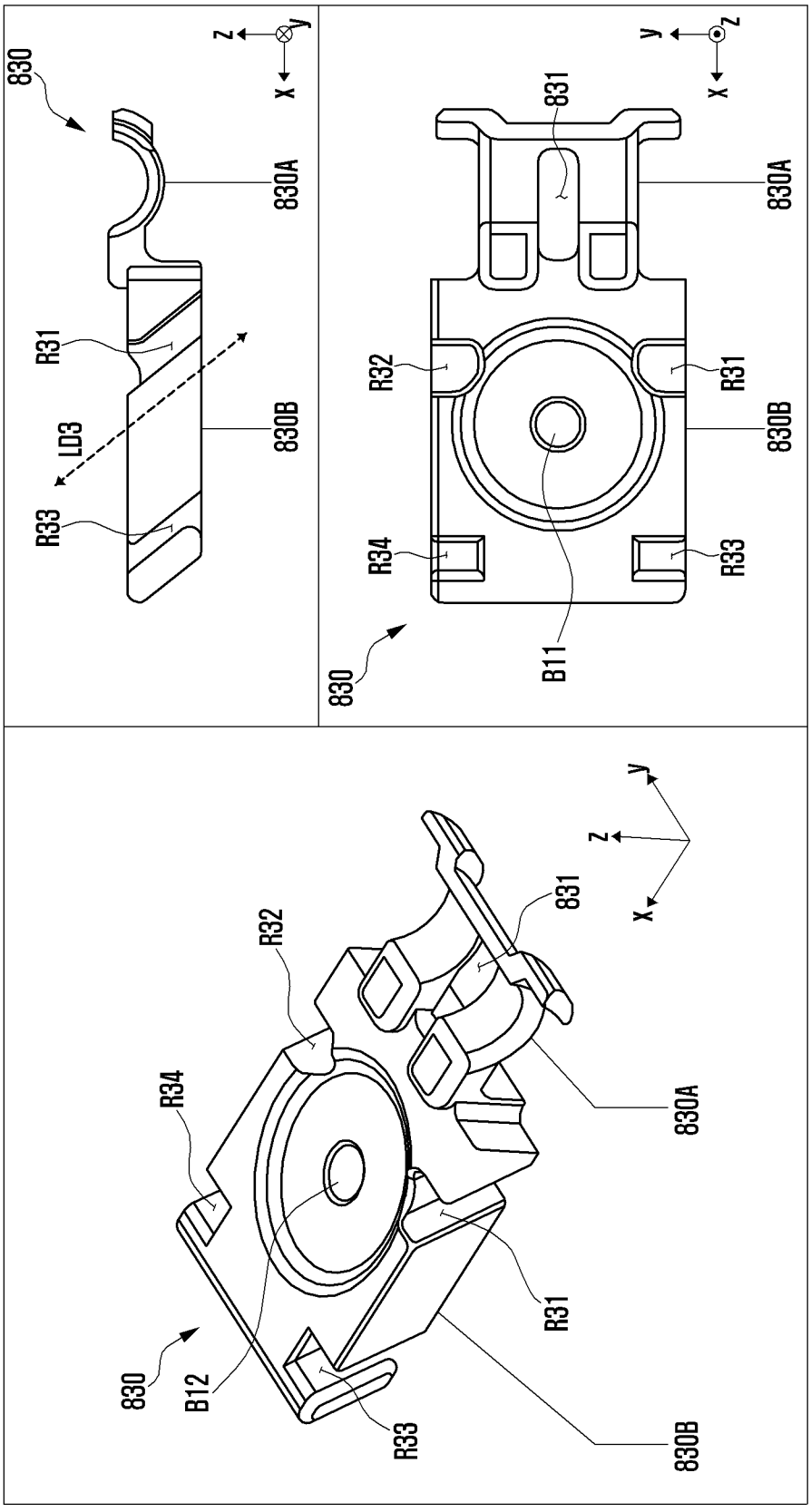


FIG. 12

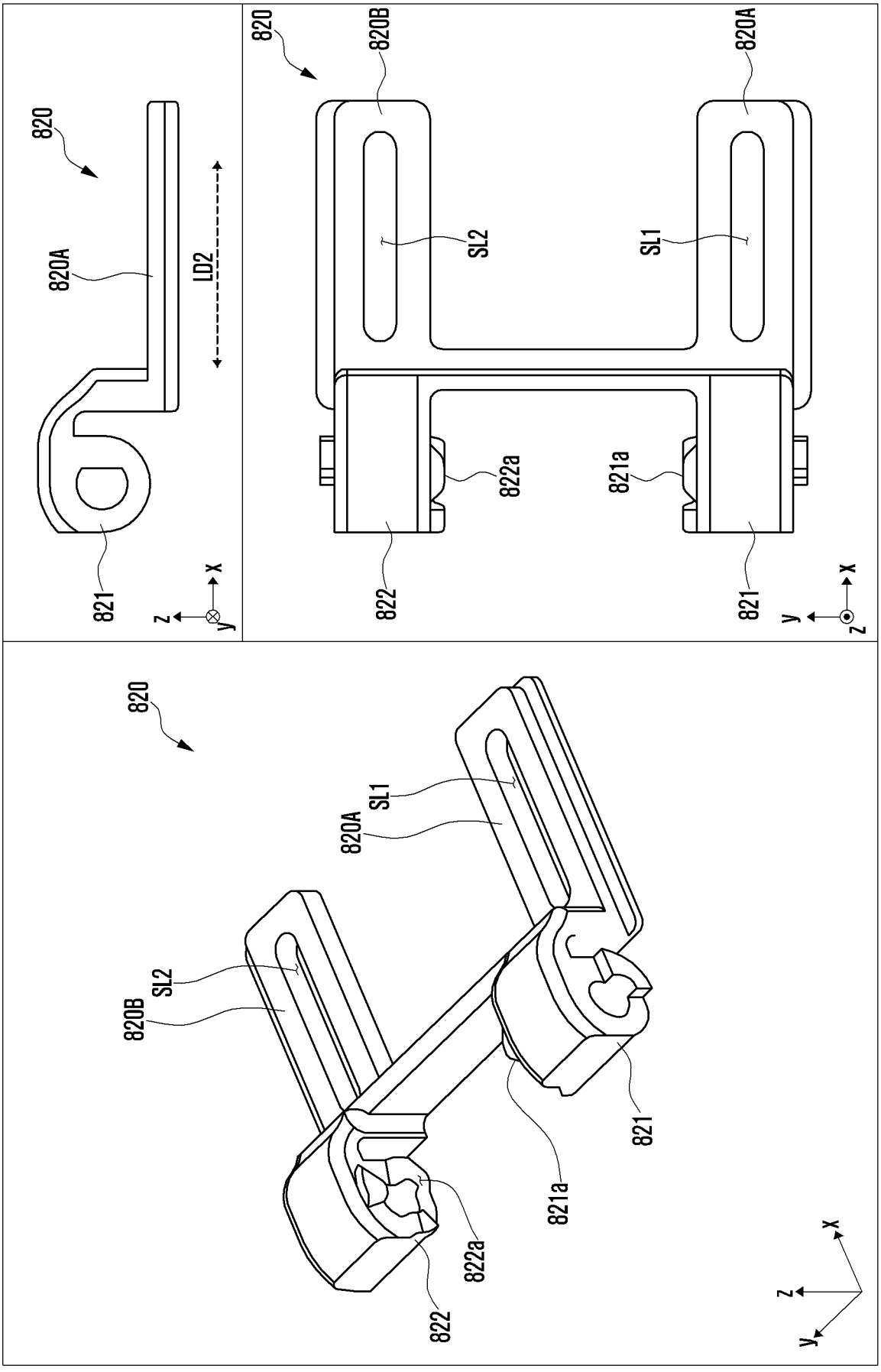

820
820A
LD2
821
820
820B
820A
SL2
SL1
822
822a
821a
821
820
820B
SL2
820A
SL1
822
822a
821a
821

FIG. 13

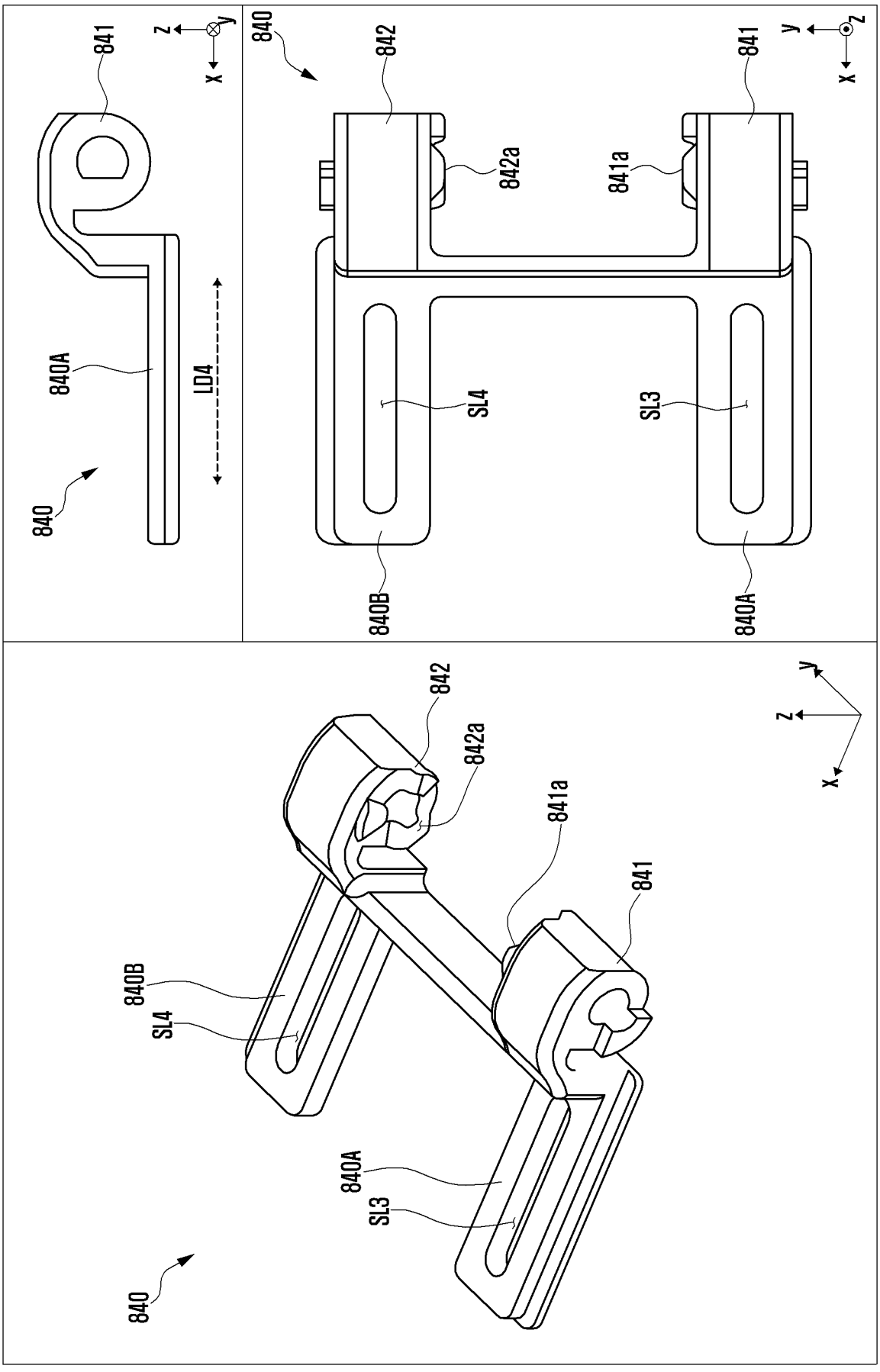

841
z
y
x
840A
LD4
840
840
842
842a
841a
841
y
z
x
SL4
SL3
840B
840A
842
842a
841a
841
y
z
x
840B
SL4
840A
SL3
840

FIG. 14

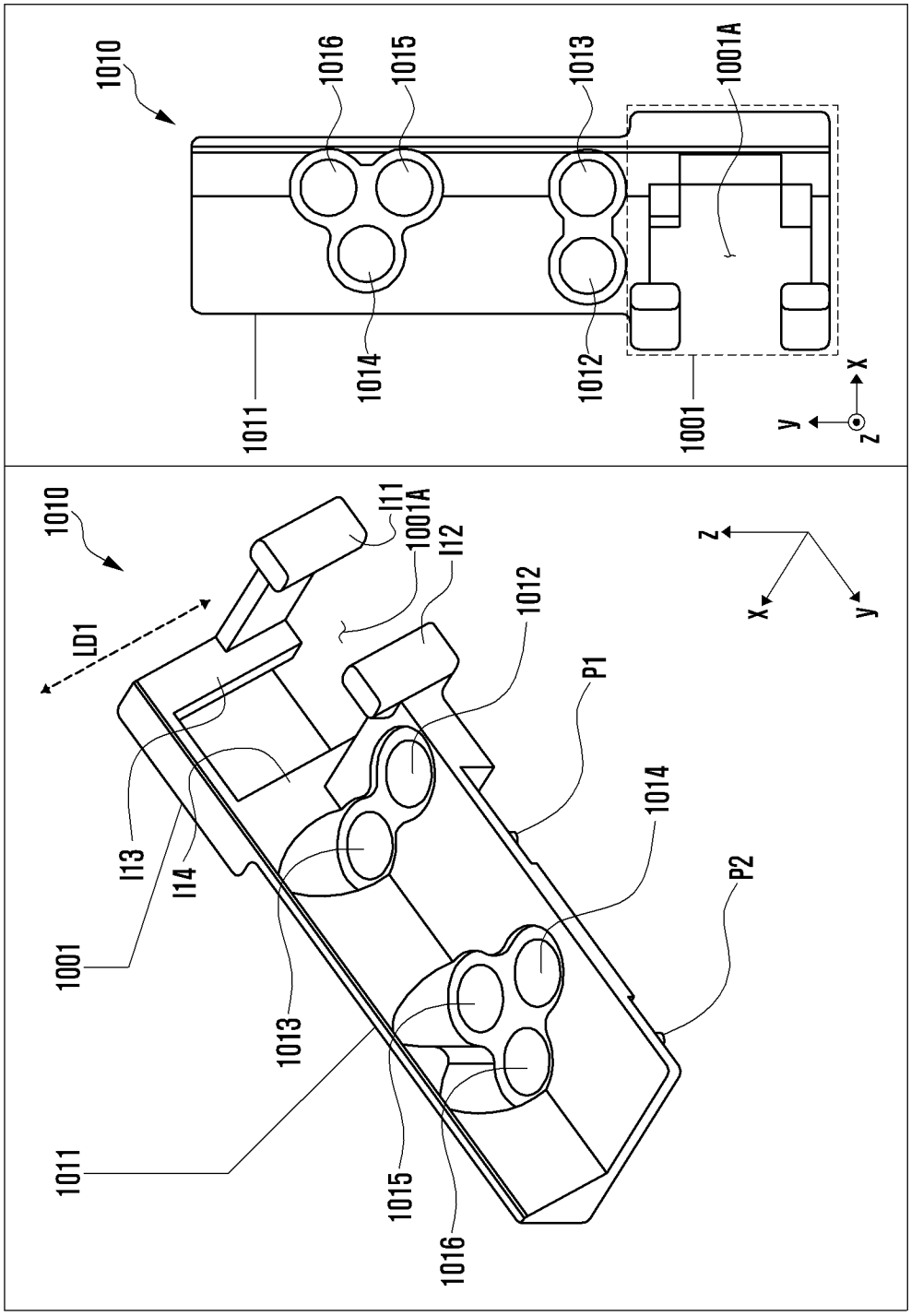

1010
1016
1015
1013
1001A
1011
1014
1012
1001
y
x
z
1010
I11
1001A
I12
1012
LD1
P1
z
x
y
I13
I14
1014
1001
P2
1013
1011
1015
1016

FIG. 15

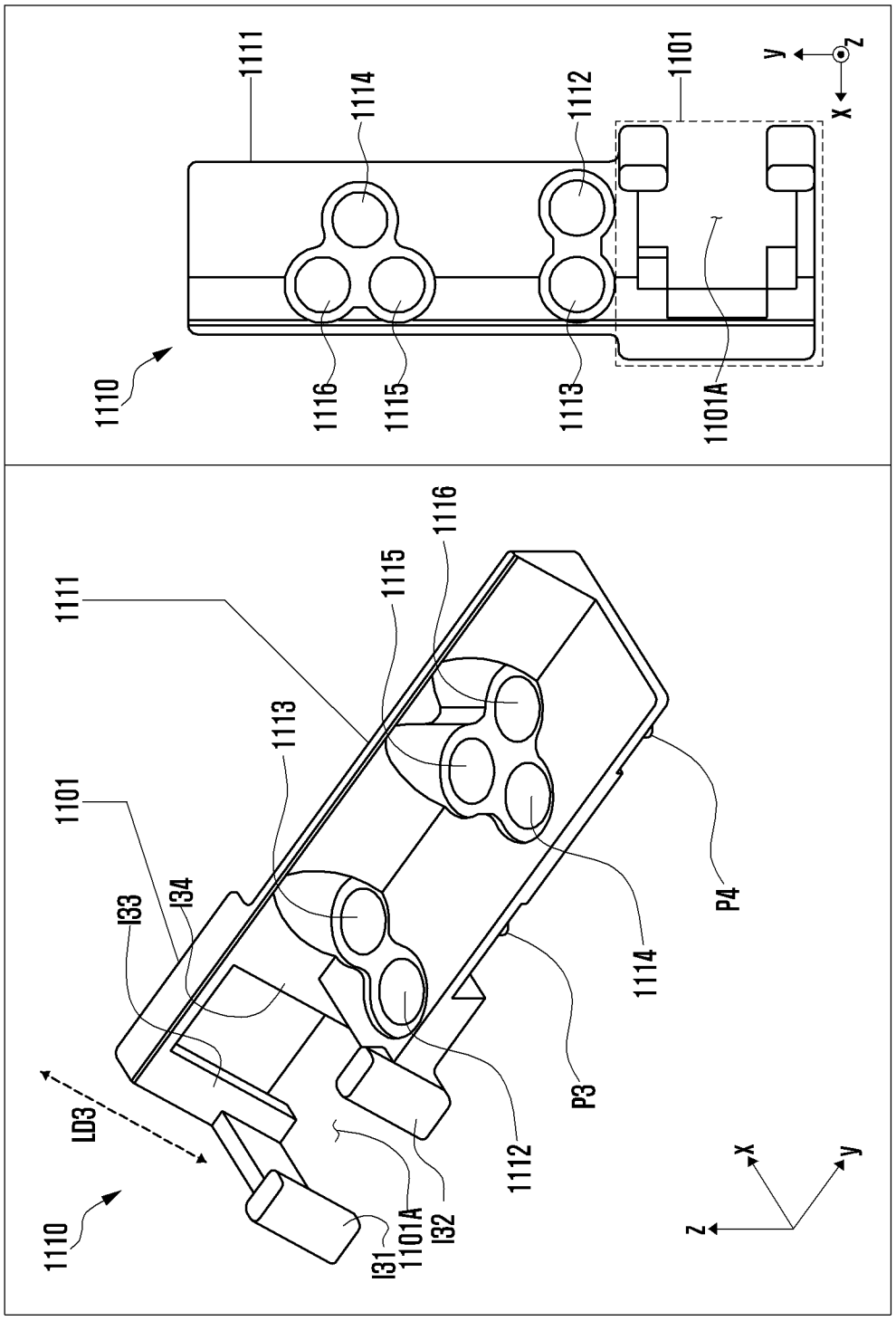

1111
1114
1112
1101
y
z
x
1110
1116
1115
1113
1101A
1111
1116
1115
1113
1101
I33
I34
P4
1114
LD3
P3
1112
1110
I31
1101A
I32
z
x
y

FIG. 16

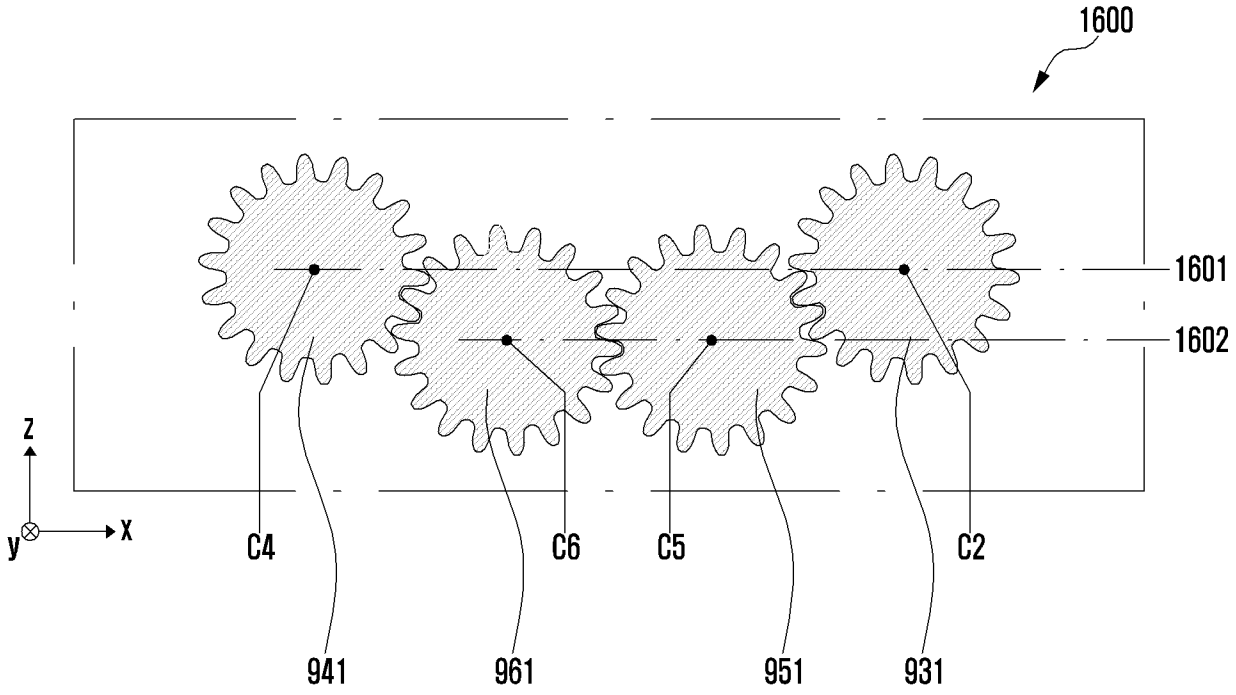


FIG. 17

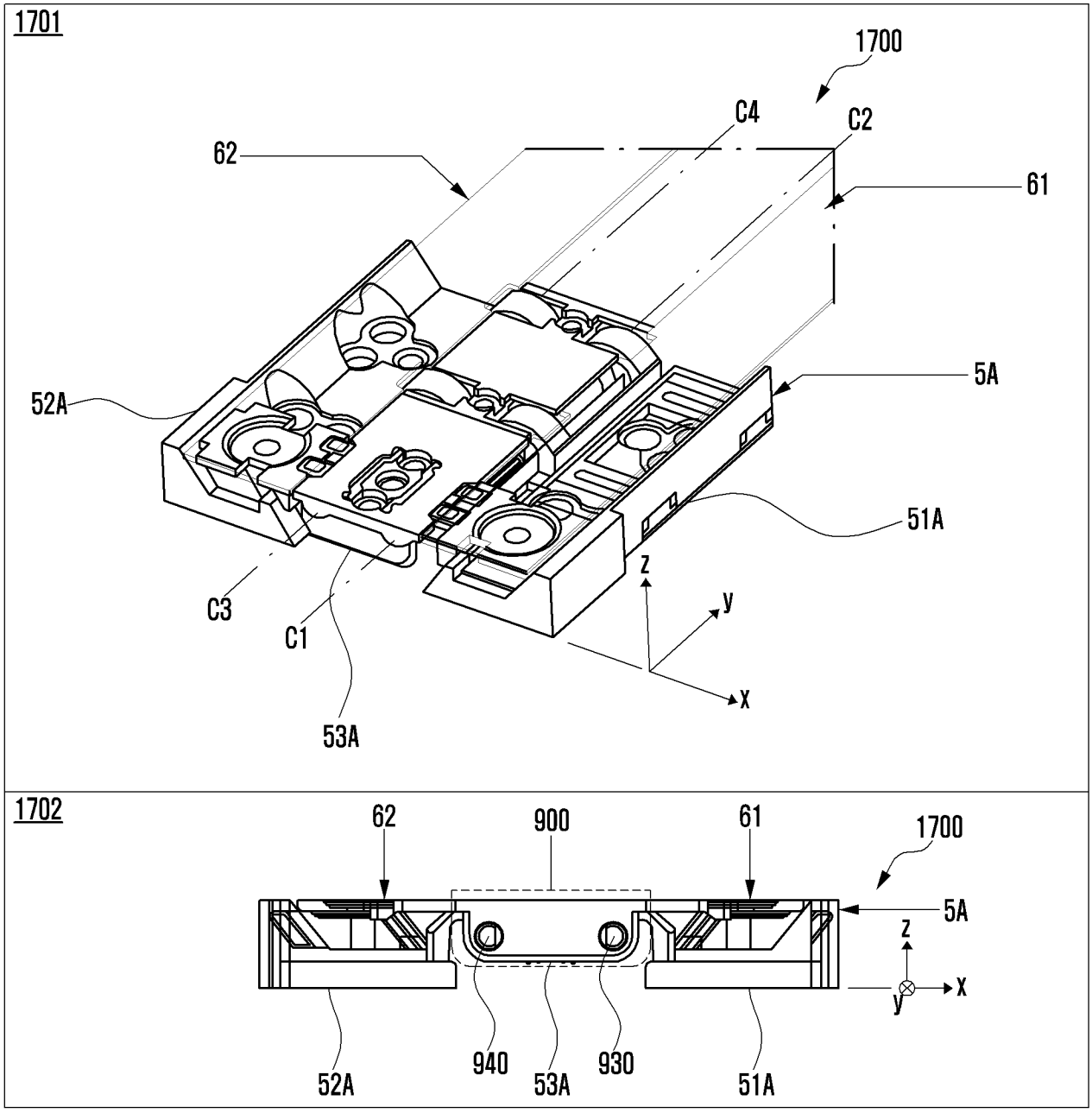

1701
1700
C4
C2
62
61
5A
52A
51A
C3
C1
53A
z
y
x
1702
62
900
61
1700
5A
z
x
y
52A
940
53A
930
51A

FIG. 18

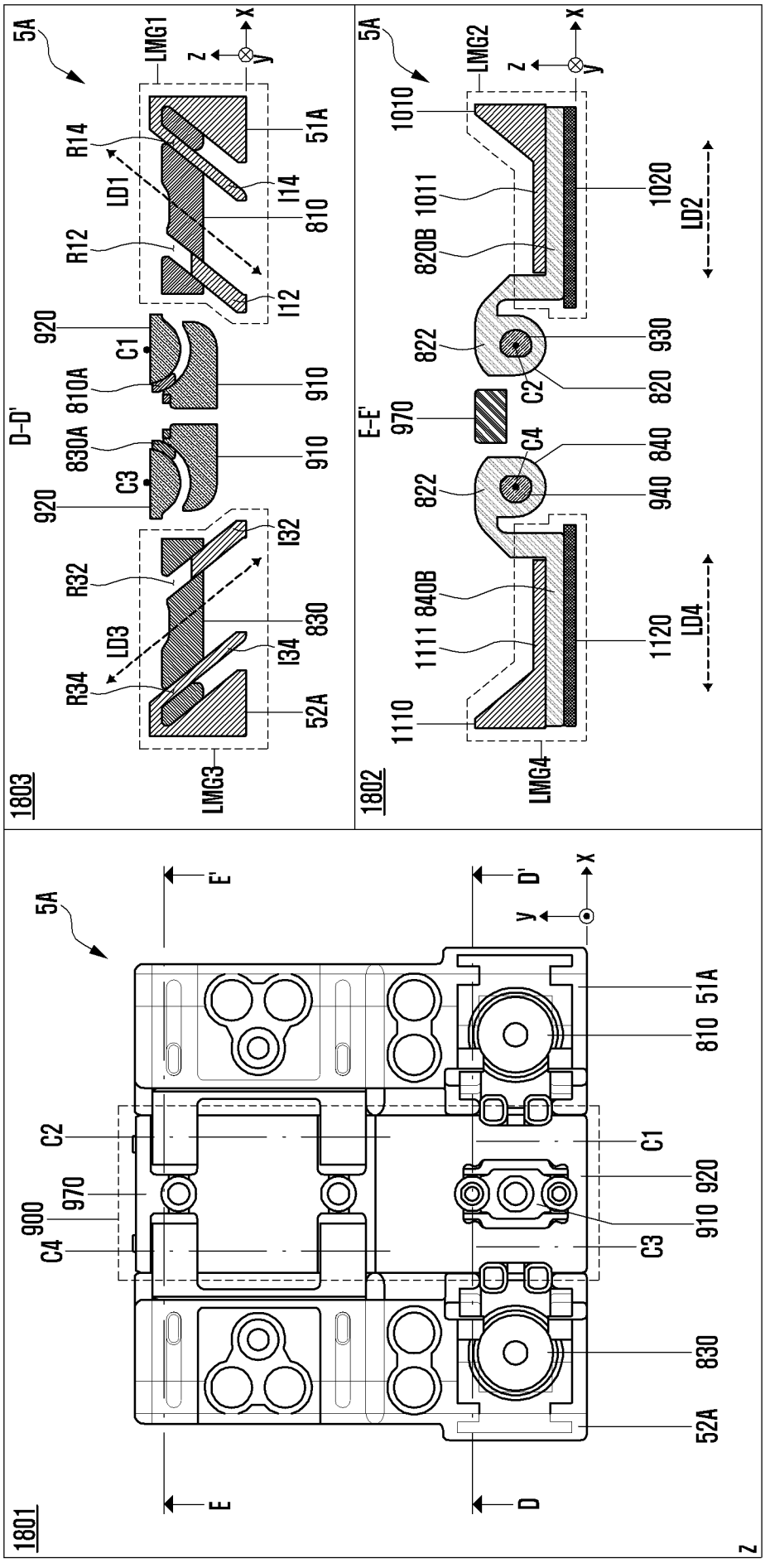

1801
1802
1803
5A
LMG1
LMG2
LMG3
LMG4
D-D'
E-E'
LD1
LD2
LD3
LD4
R14
R12
R32
R34
I14
I12
I32
I34
51A
52A
810
810A
830
830A
910
920
C1
C2
C3
C4
820
820B
822
830
840
840B
940
970
1010
1011
1020
1110
1111
1120
900
x
y
z
D
D'
E
E'

FIG. 19

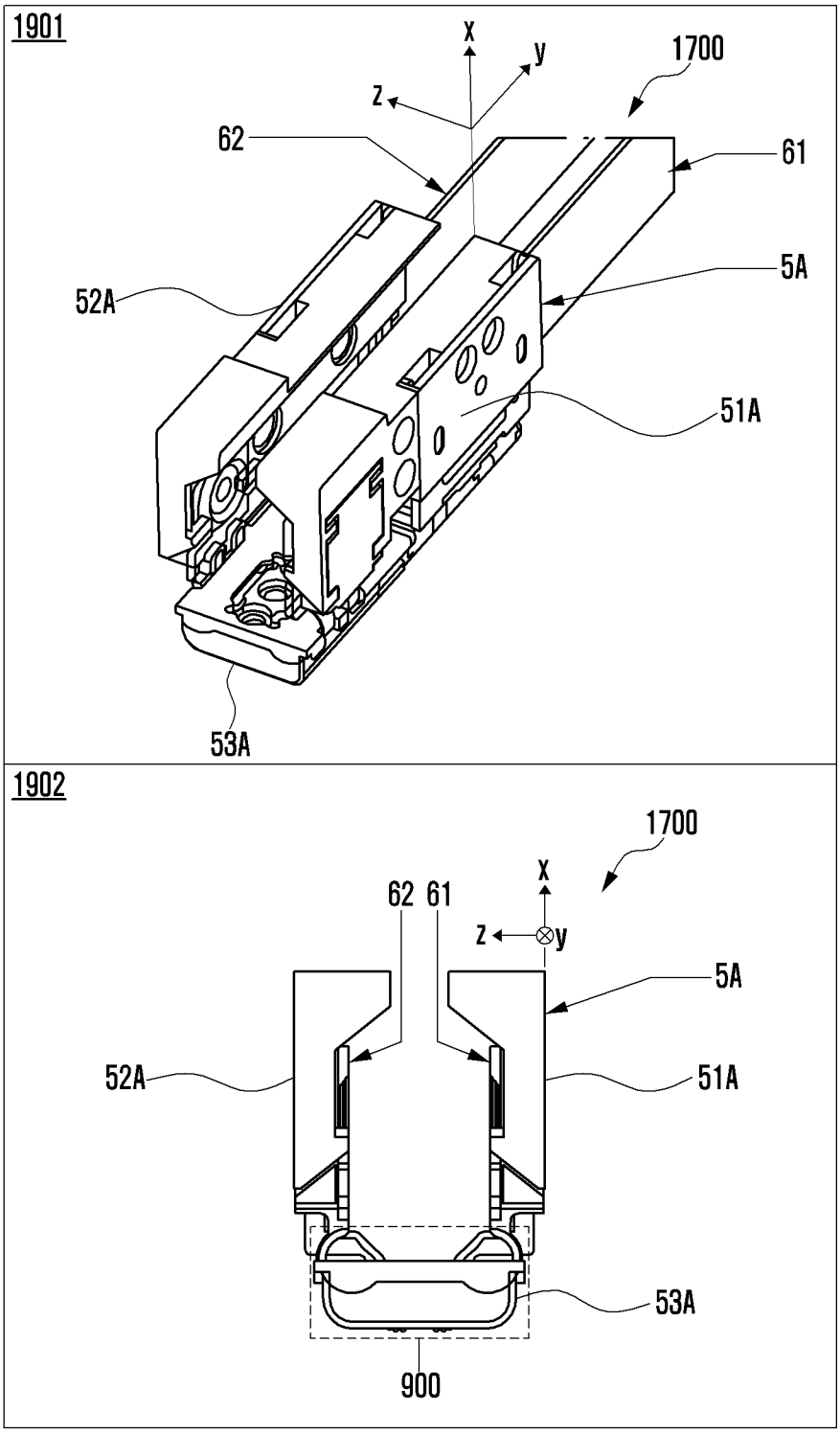

1901
x
y
z
1700
62
61
5A
52A
51A
53A
1902
1700
x
62 61
z
y
5A
52A
51A
53A
900

FIG. 20

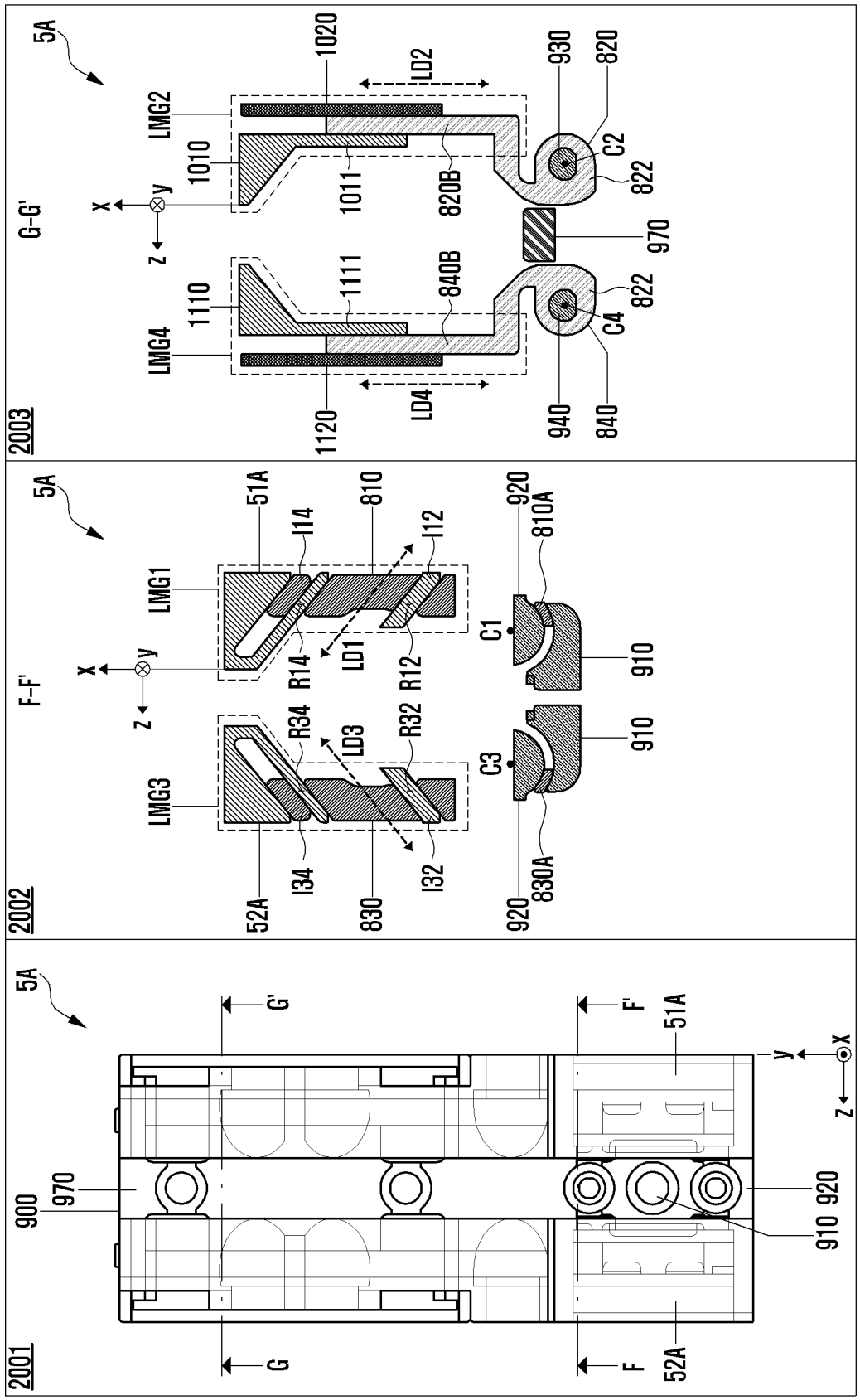

2001
5A
G
G'
F
F'
900
970
910
920
51A
52A
x
y
z
2002
F-F'
LMG1
LMG3
51A
52A
I14
I12
I34
I32
R14
R12
R34
R32
LD1
LD3
810
830
910
920
C1
C3
810A
830A
2003
G-G'
LMG2
LMG4
1010
1110
1020
1120
1011
1111
820B
840B
LD2
LD4
930
940
820
840
822
C2
C4
970

FIG. 21

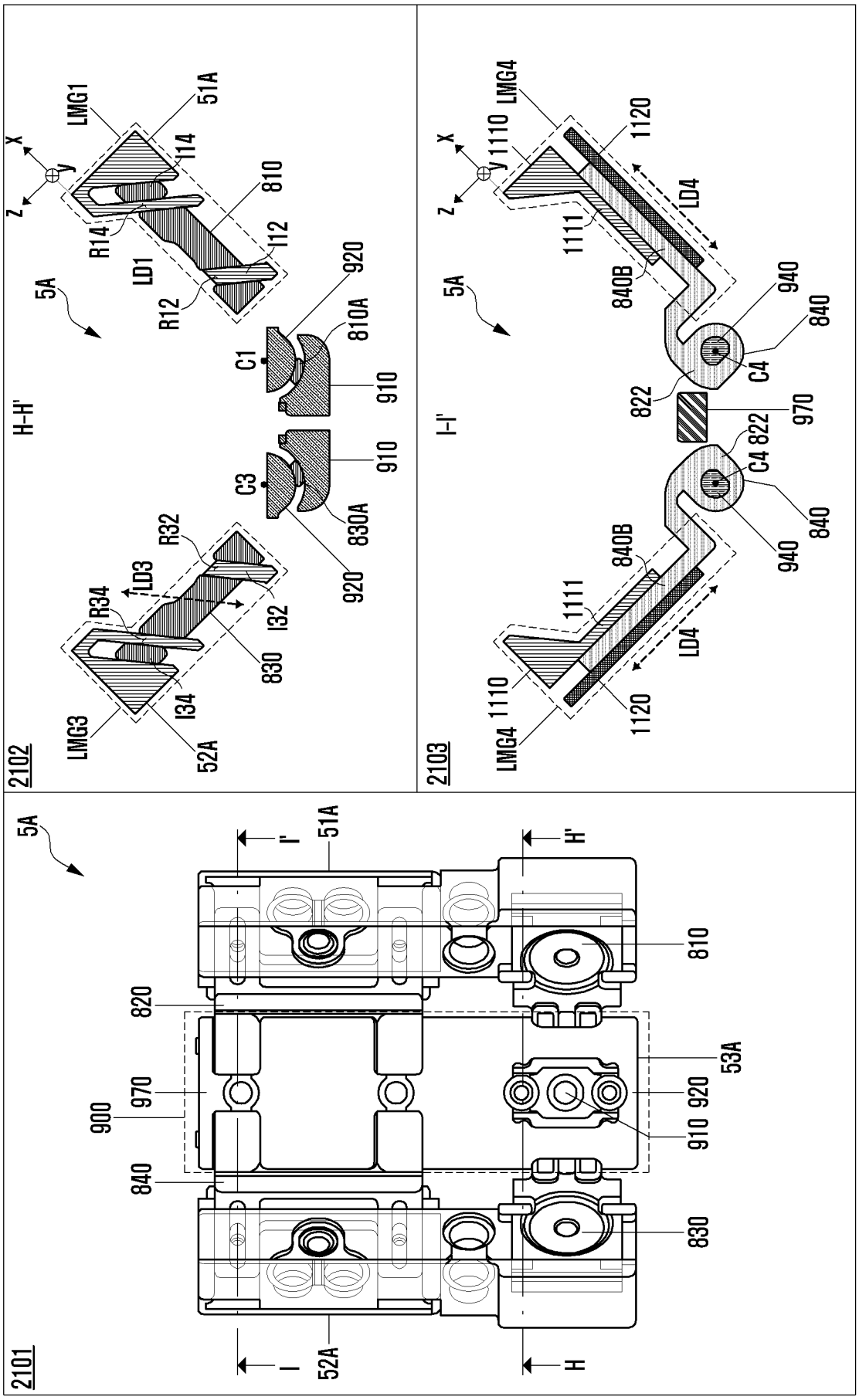

2101
2102
2103
5A
H-H'
I-I'
LMG1
LMG3
LMG4
51A
52A
53A
LD1
LD3
LD4
R12
R14
R32
R34
I12
I14
I32
I34
810
810A
820
830
830A
840
840B
910
920
940
970
900
1110
1111
1120
822
C1
C3
C4
H
H'
I
I'
x
y
z

FIG. 22

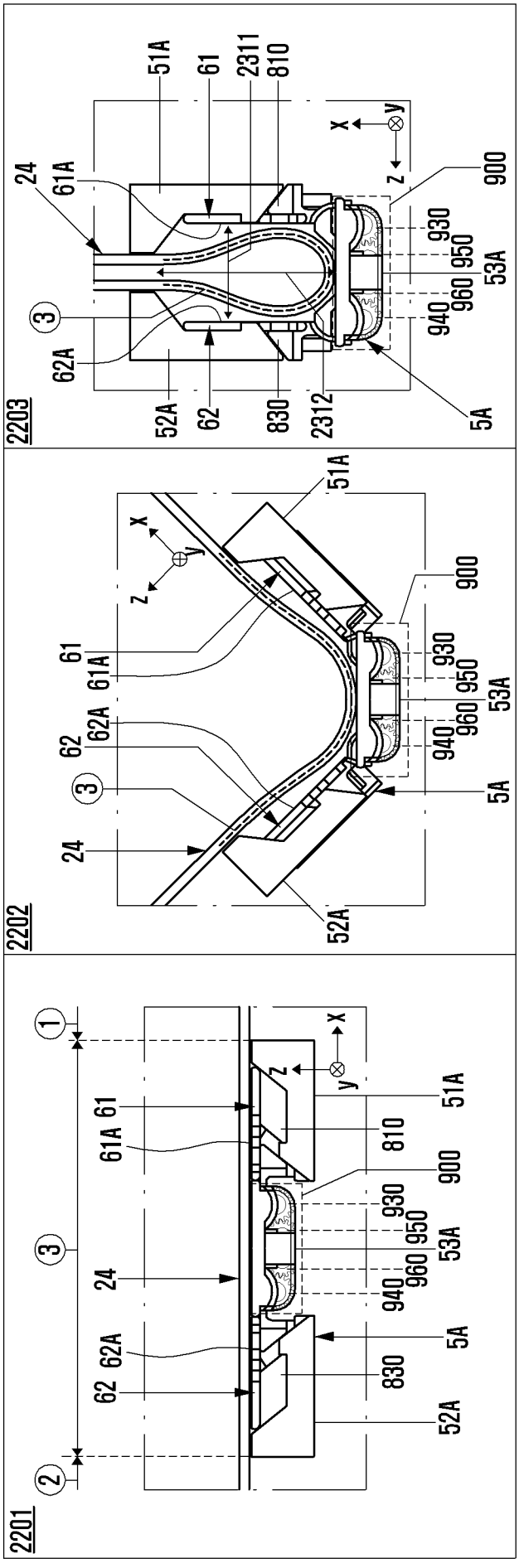

2203
51A
61
2311
810
24
61A
900
930
950
53A
960
940
3
62A
52A
62
830
2312
5A
2202
51A
900
61
61A
930
950
53A
960
62
62A
940
3
5A
24
52A
2201
1
61
61A
51A
810
900
930
950
53A
960
940
3
24
62A
5A
62
830
52A
2

FIG. 23

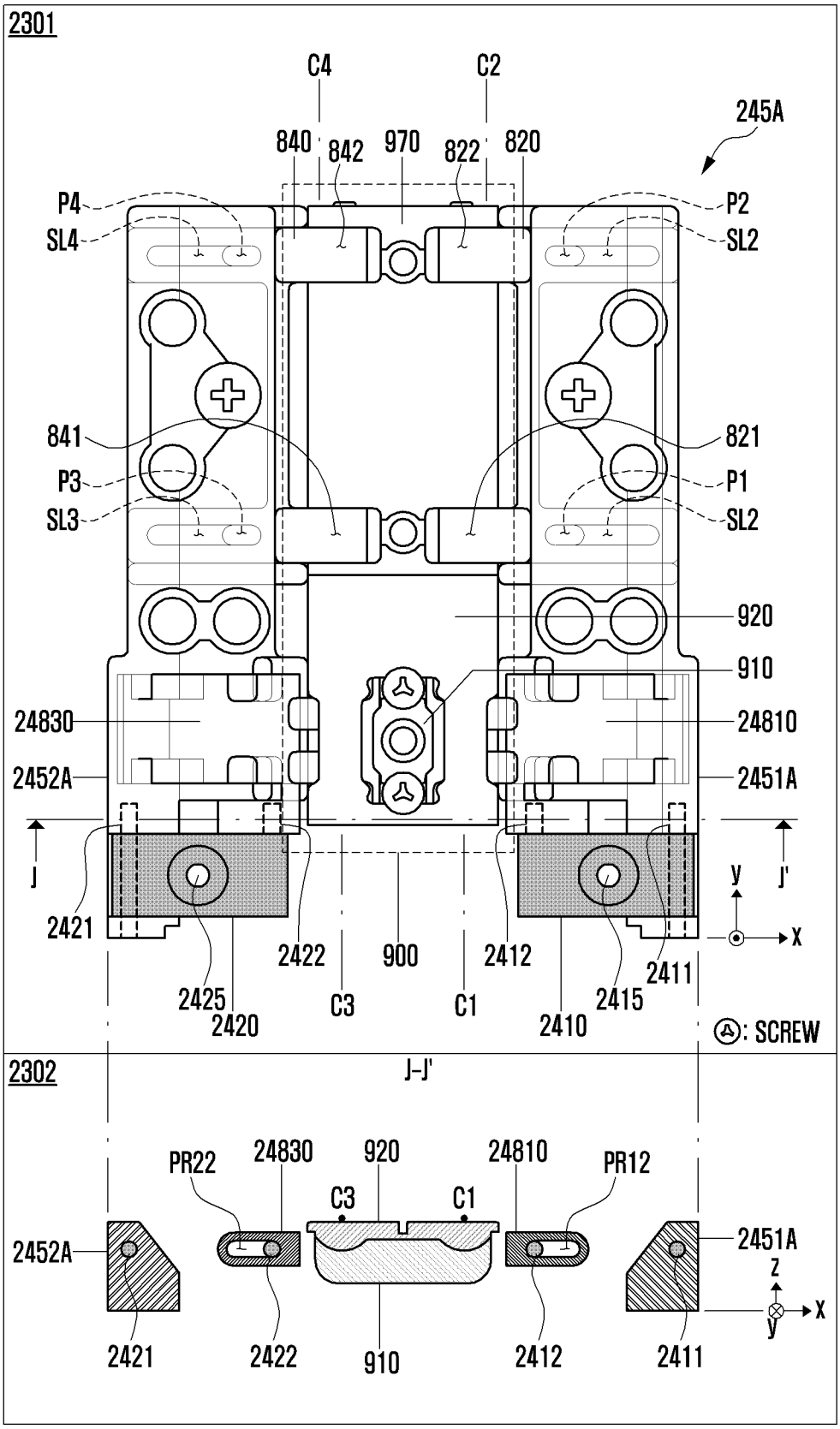

2301
C4
C2
245A
840
842
970
822
820
P4
SL4
P2
SL2
841
821
P3
SL3
P1
SL2
920
910
24830
24810
2452A
2451A
J
J'
y
x
2421
2422
900
2412
2411
2425
2420
C3
C1
2410
2415
: SCREW
2302
J-J'
PR22
24830
920
24810
PR12
C3
C1
2452A
2451A
z
y
x
2421
2422
910
2412
2411

FIG. 24

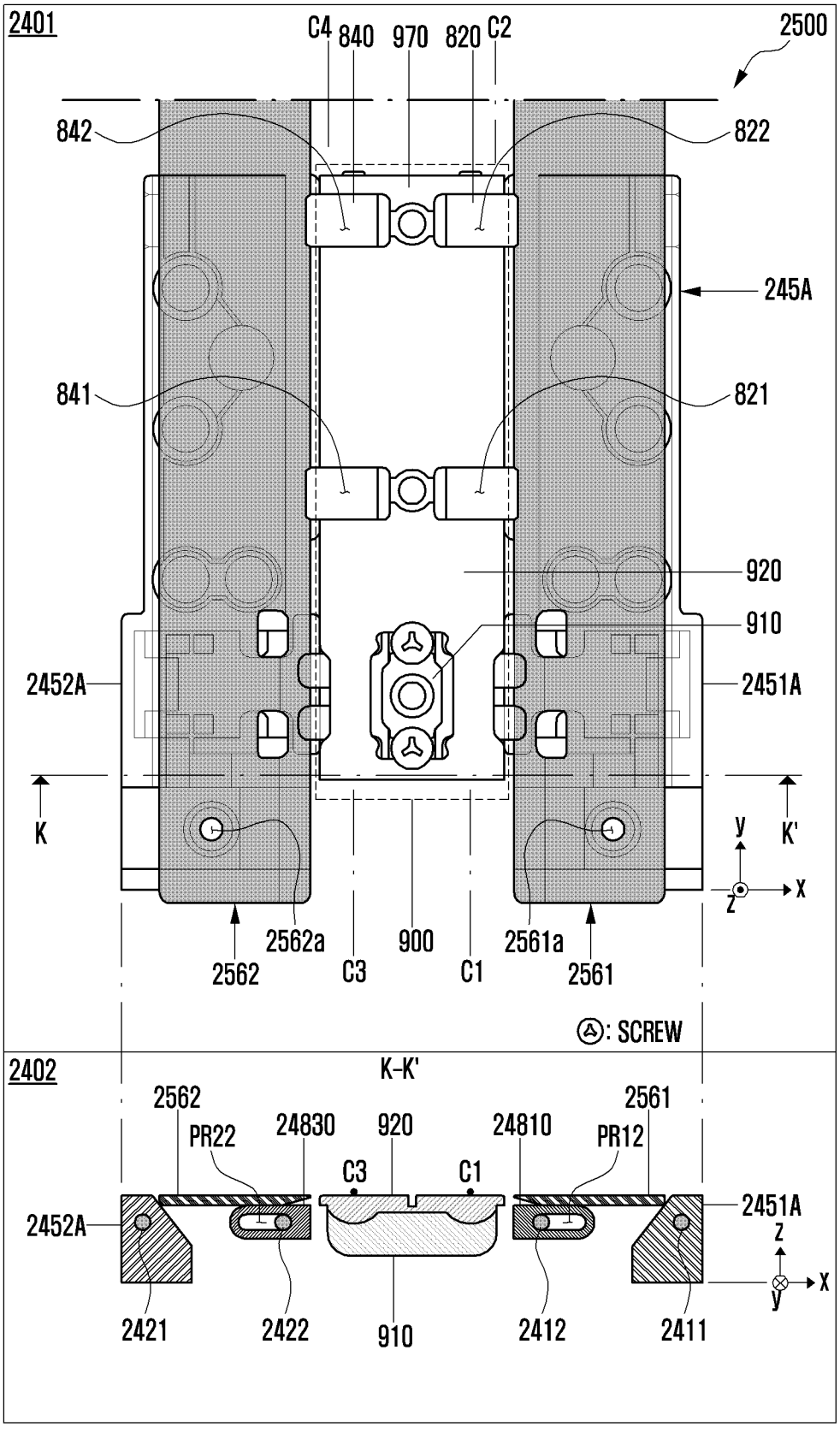

2401
C4
840
970
820
C2
2500
842
822
245A
841
821
920
910
2452A
2451A
K
K'
y
x
z
2562a
900
2561a
2562
C3
C1
2561
Ⓐ: SCREW
2402
K-K'
2562
PR22
24830
920
24810
PR12
2561
C3
C1
2452A
2451A
z
x
y
2421
2422
910
2412
2411

FIG. 25

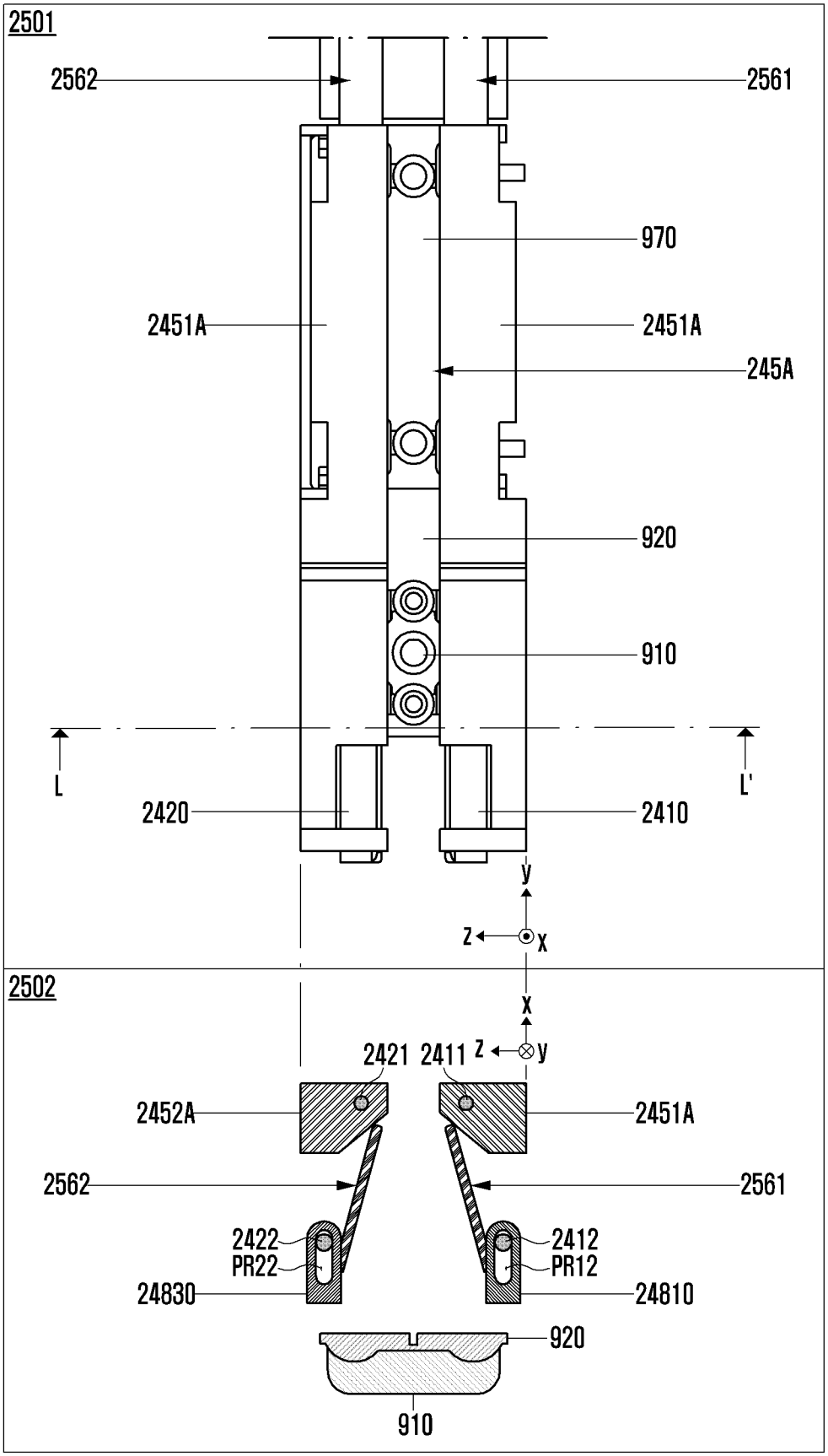
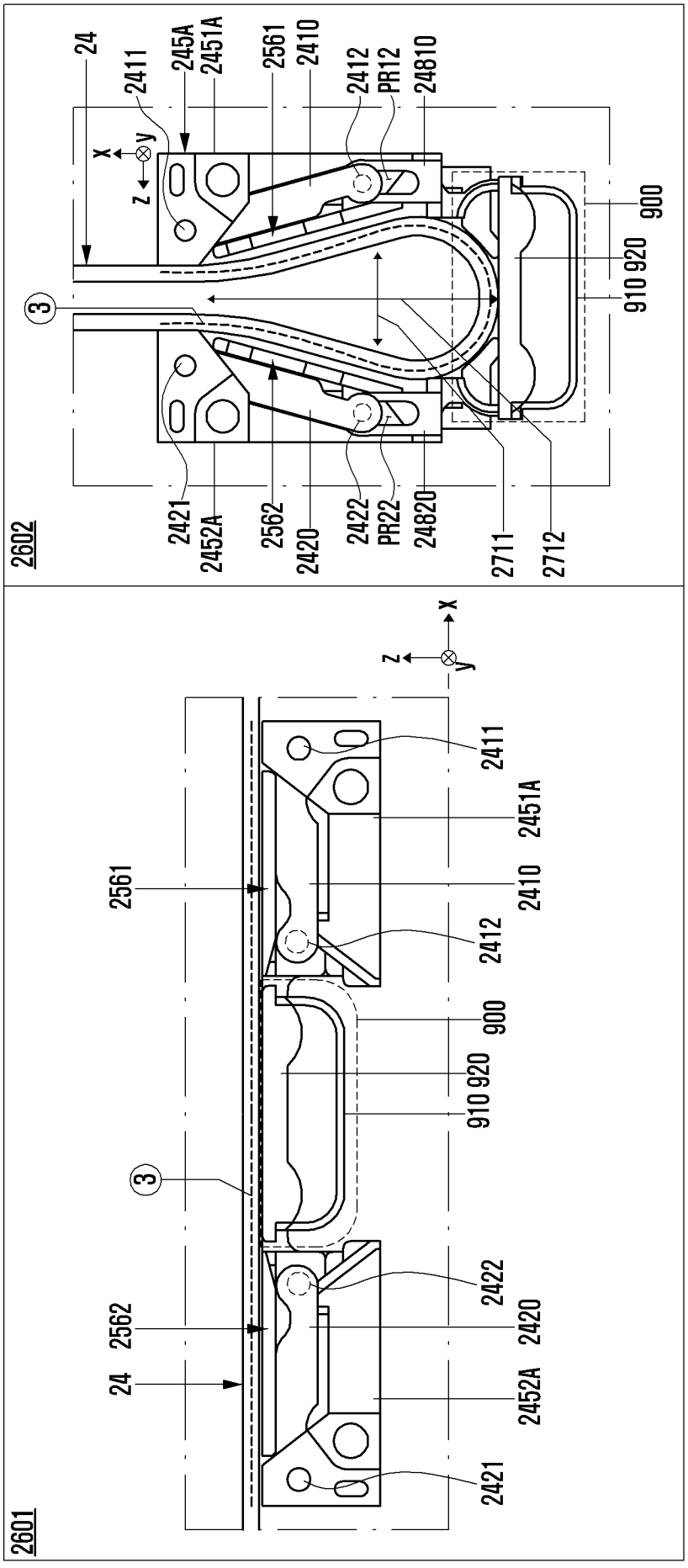

2501
2562
2561
970
2451A
2451A
245A
920
910
L
L'
2420
2410
y
z
x
2502
x
2421
2411
z
y
2452A
2451A
2562
2561
2422
PR22
2412
PR12
24830
24810
920
910

FIG. 26


2602
24
2411
245A
2451A
2561
2410
2412
PR12
24810
900
920
910
3
2421
2452A
2562
2420
2422
PR22
24820
2711
2712
2601
x
z
y
2411
2451A
2561
2410
2412
900
920
910
3
2422
2562
2420
24
2452A
2421