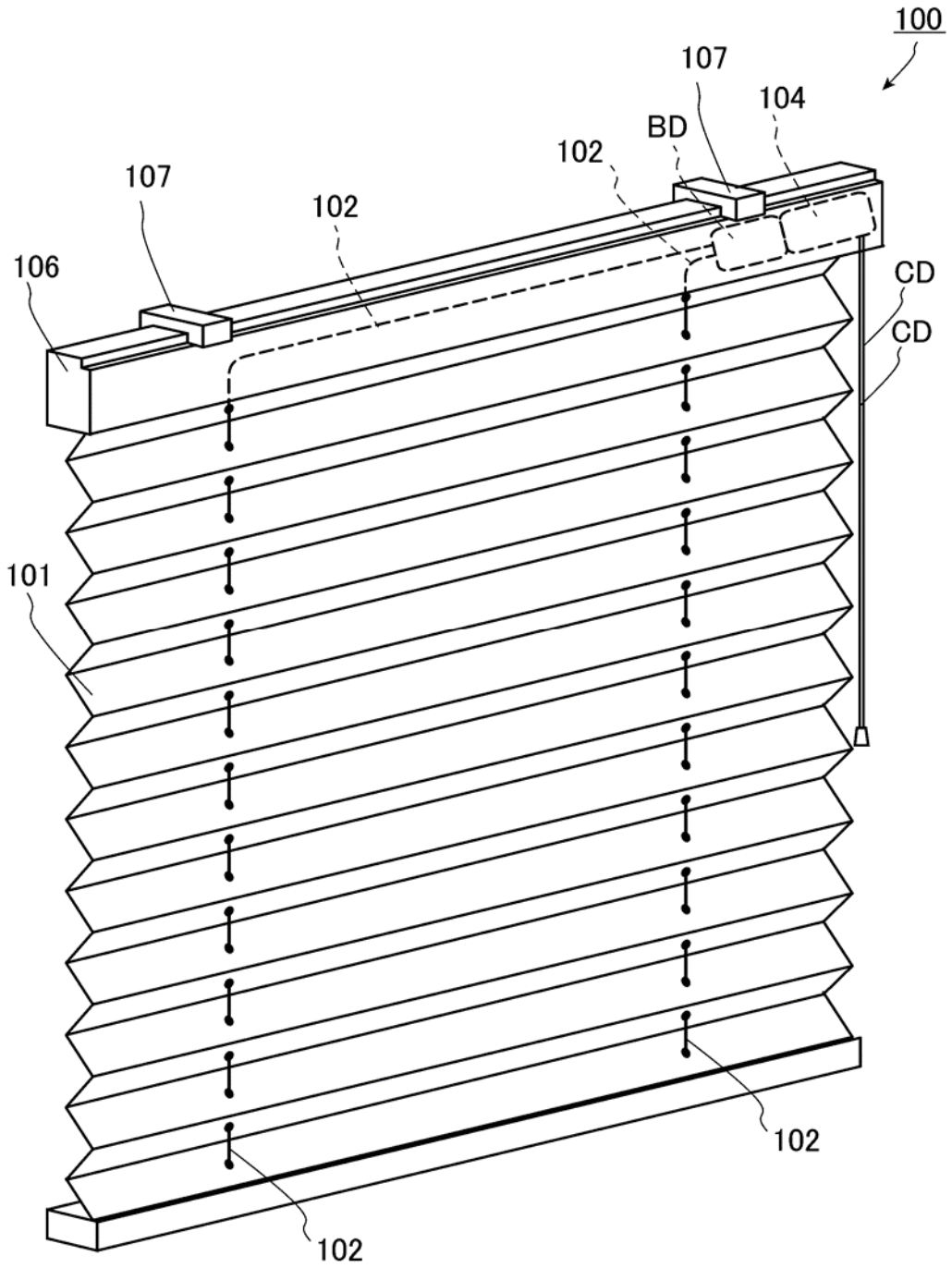
FIG.1



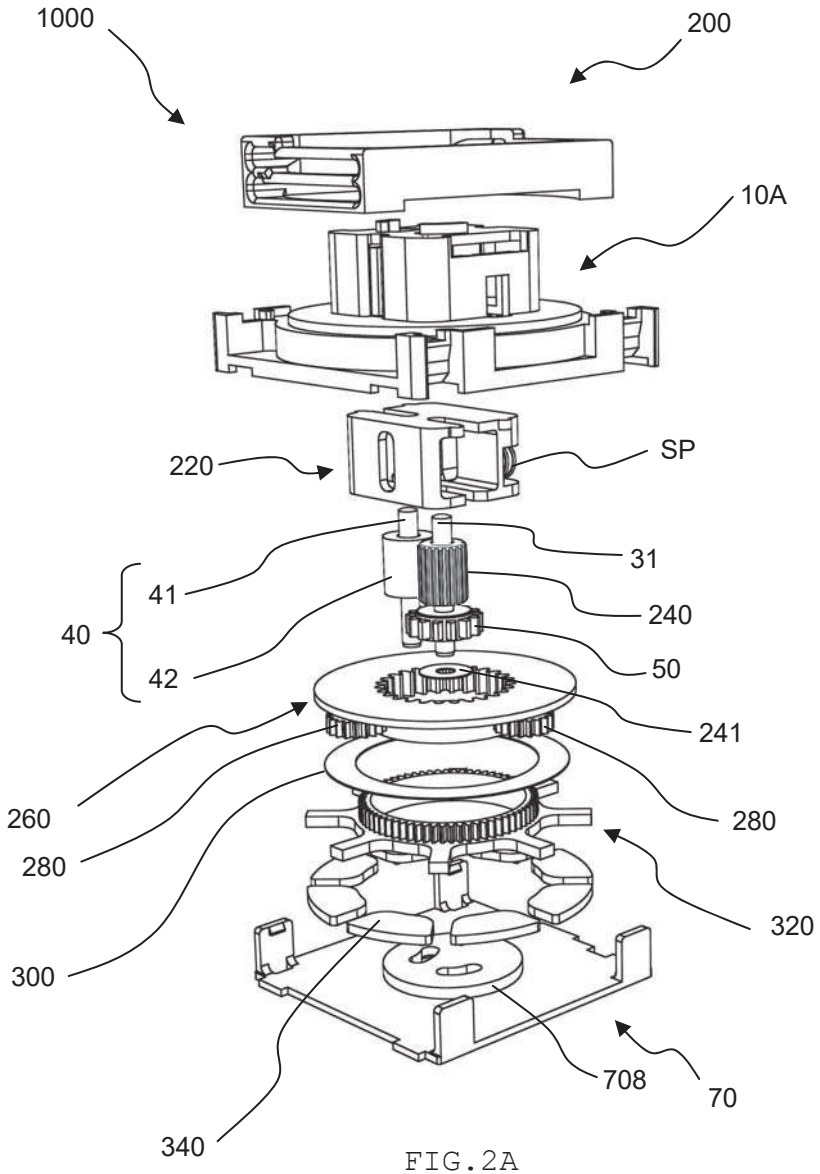

1000
200
10A
220
SP
31
41
240
40
42
50
241
260
280
280
320
300
708
70
340

FIG.2A

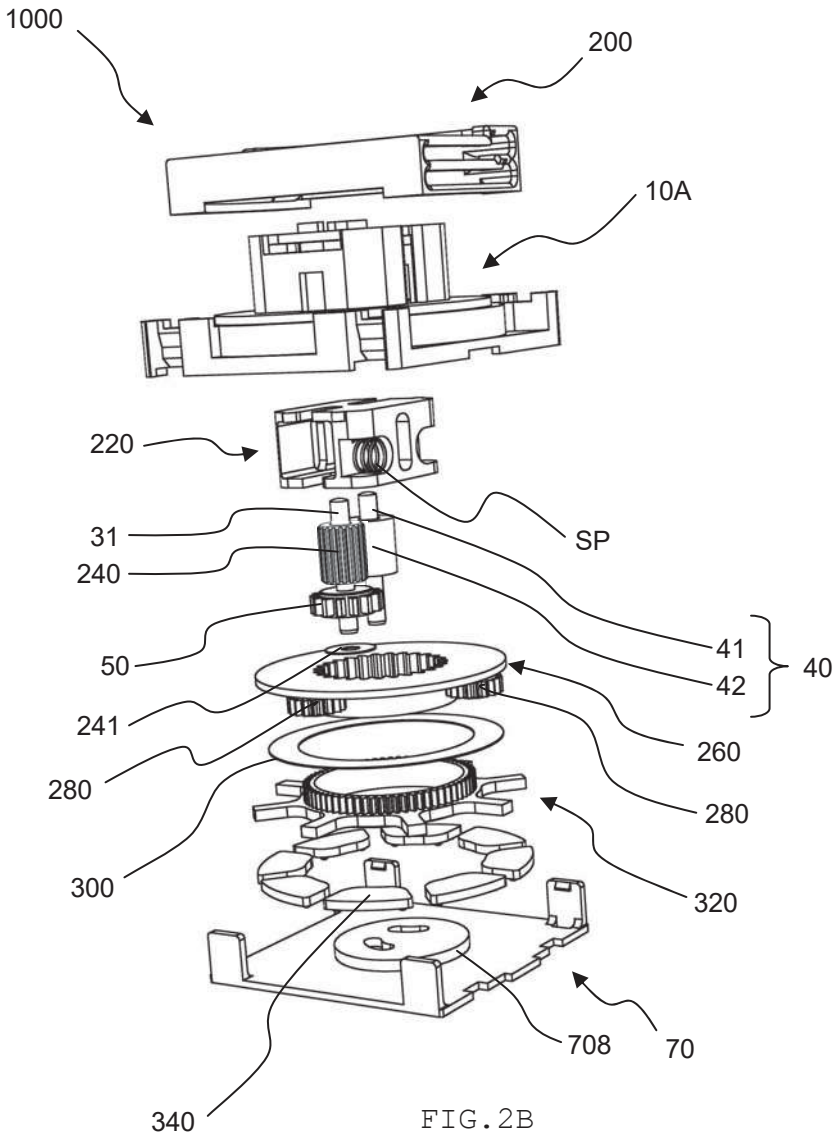

1000
200
10A
220
SP
31
240
41
42
40
50
241
260
280
280
320
300
708
70
340

FIG.2B

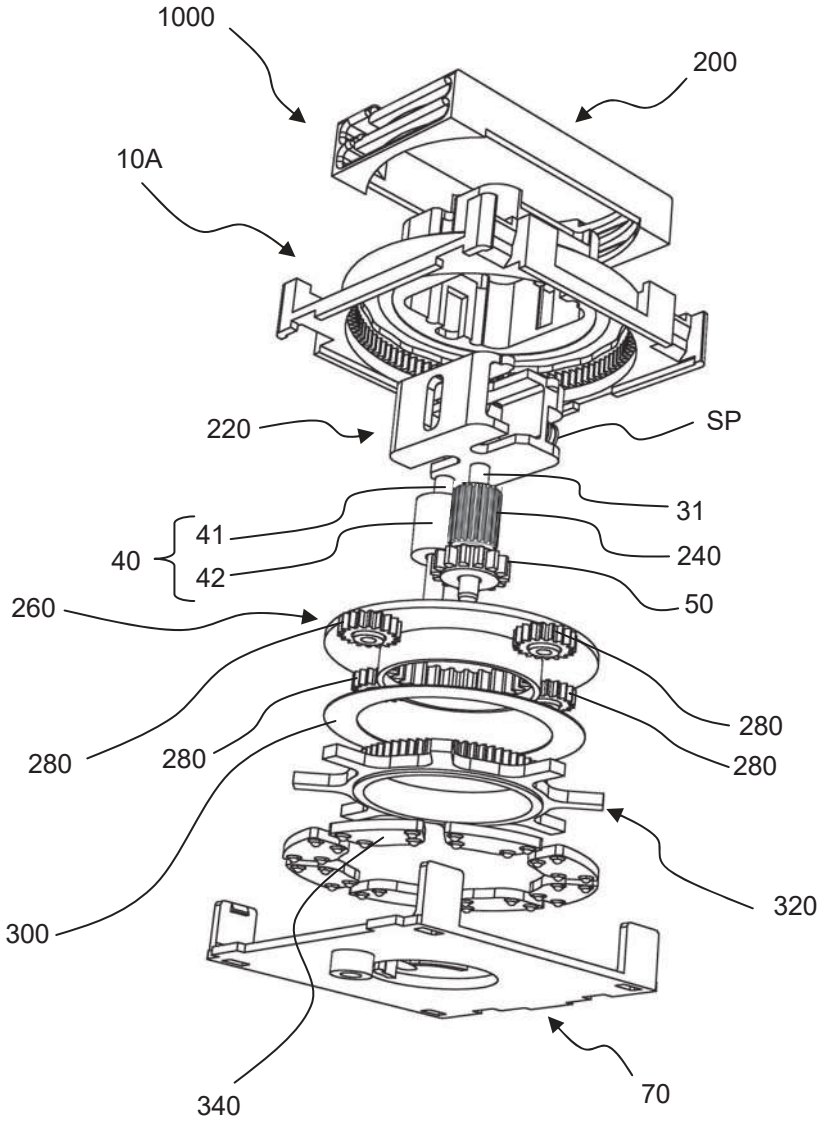

1000
200
10A
220
SP
31
41
40
42
240
50
260
280
280
280
280
300
320
340
70

FIG.3A

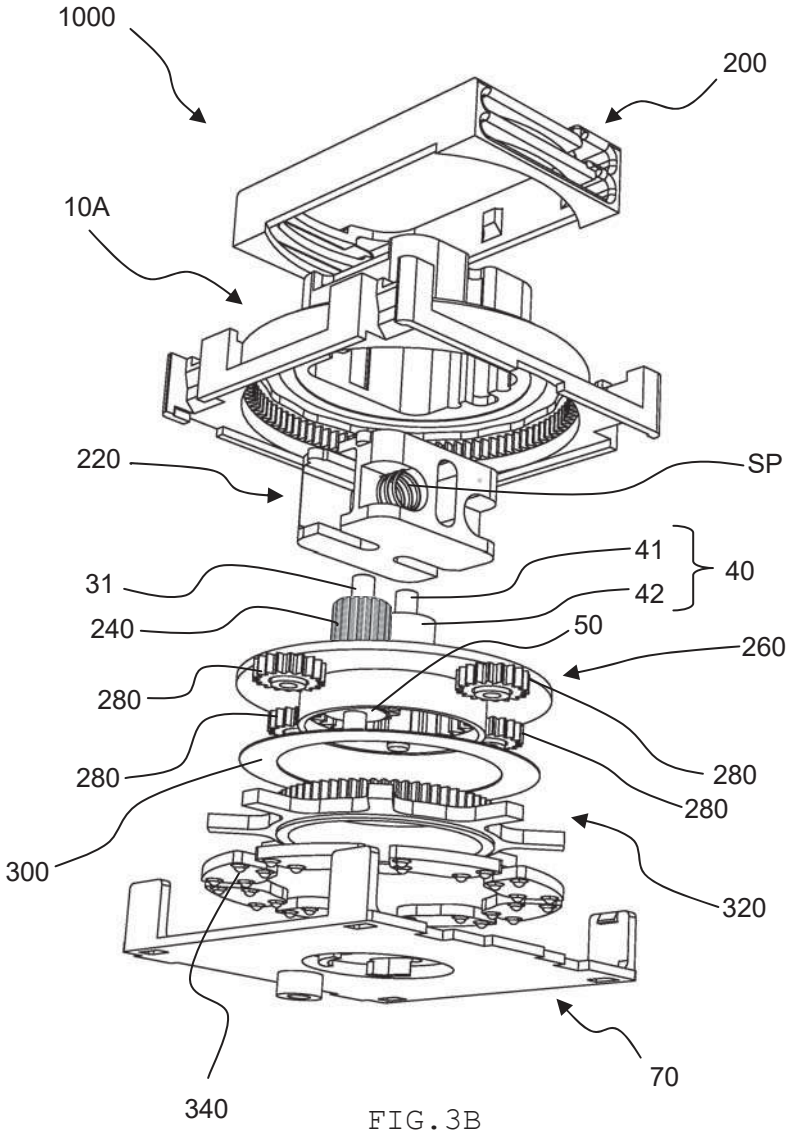
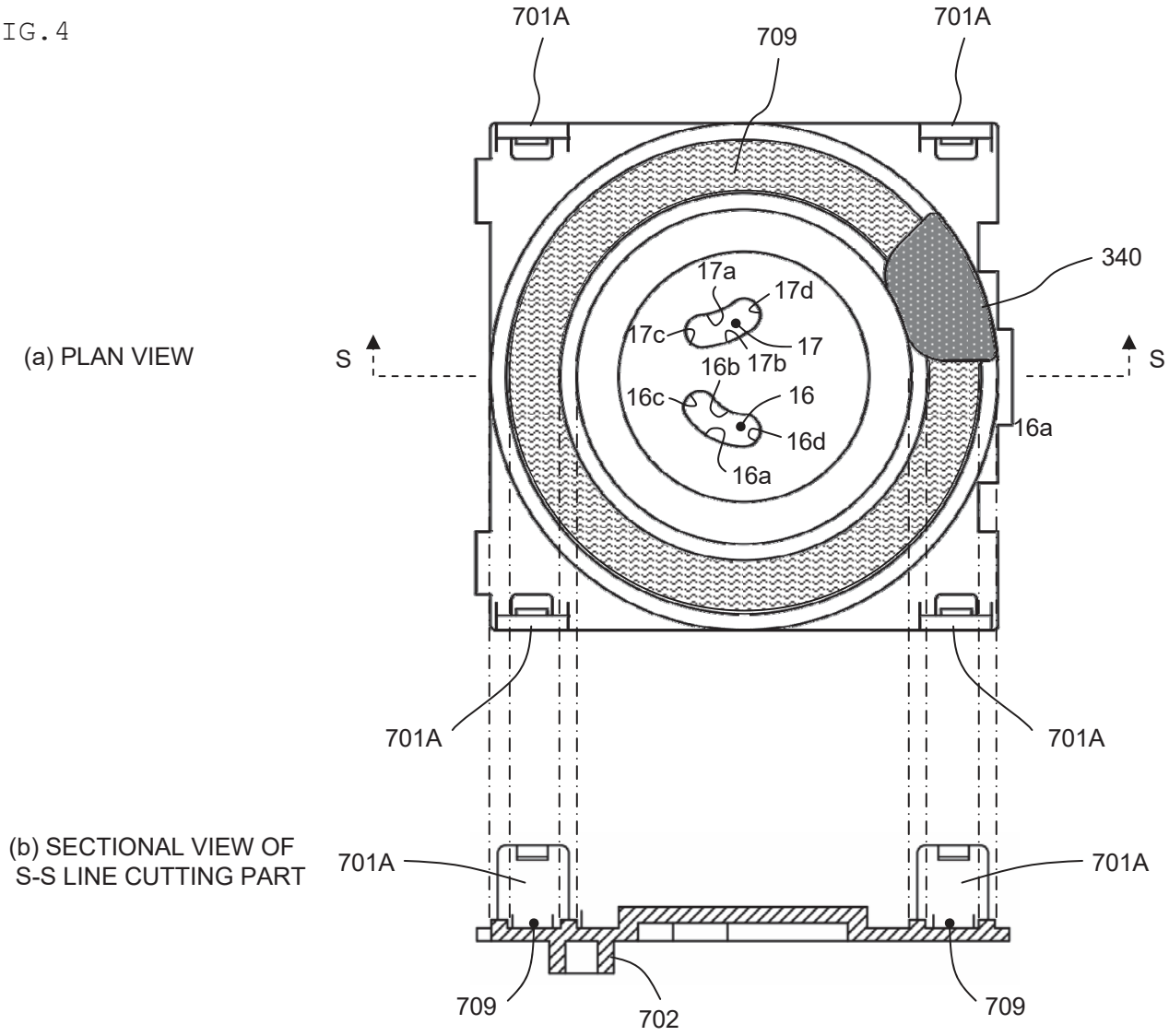

1000
200
10A
220
SP
41
40
42
31
240
50
260
280
280
280
280
300
320
340
70

FIG.3B

FIG.4


(a) PLAN VIEW
701A
709
701A
340
17a
17d
17c
17
16b
17b
16c
16
16d
16a
S
S
16a
701A
701A
(b) SECTIONAL VIEW OF
S-S LINE CUTTING PART
701A
701A
709
702
709

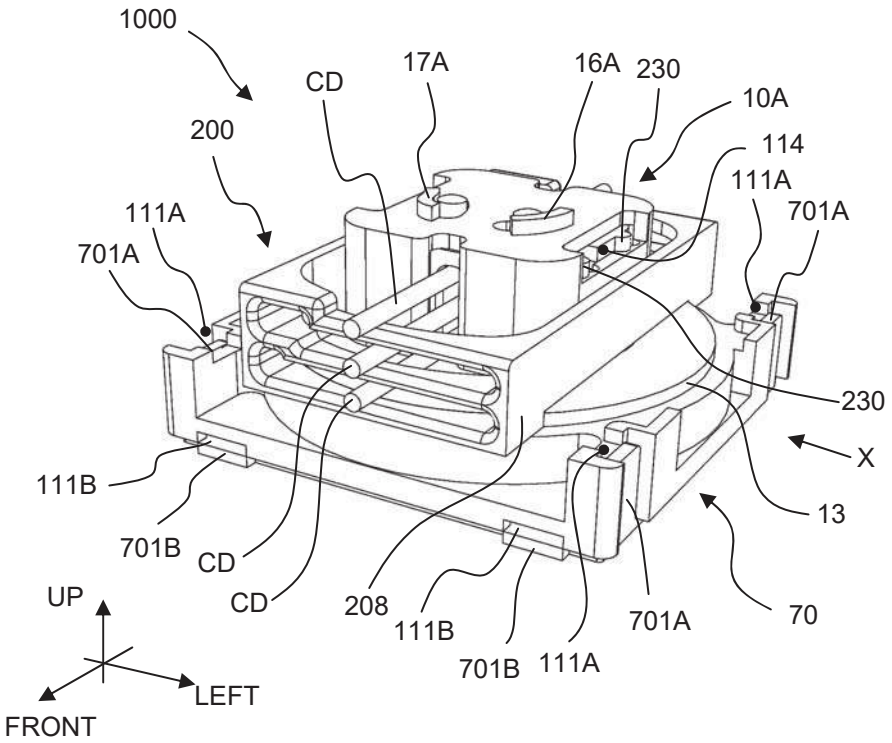

1000
CD
17A
16A
230
10A
200
114
111A
701A
111A
701A
230
X
111B
13
701B
CD
CD
208
111B
701B
111A
701A
70
UP
LEFT
FRONT

FIG. 5A

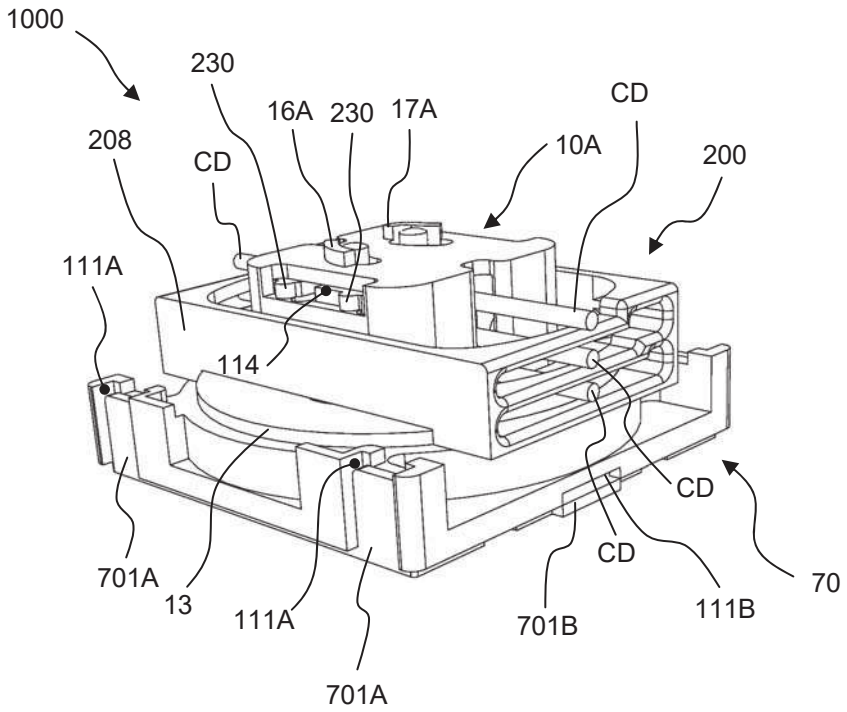
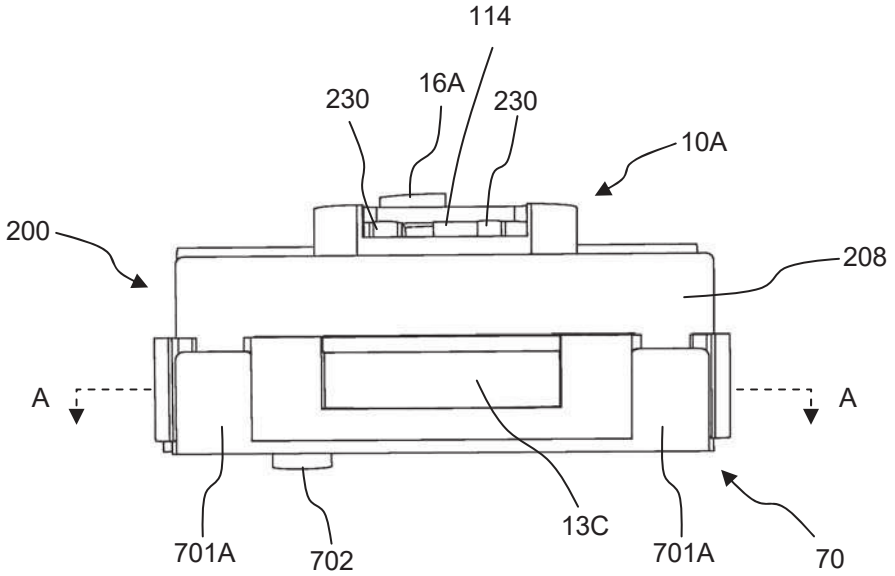

1000
230
16A
230
17A
CD
208
CD
10A
200
111A
114
CD
70
701A
13
111A
CD
111B
701B
701A

FIG.5B

FIG.5C



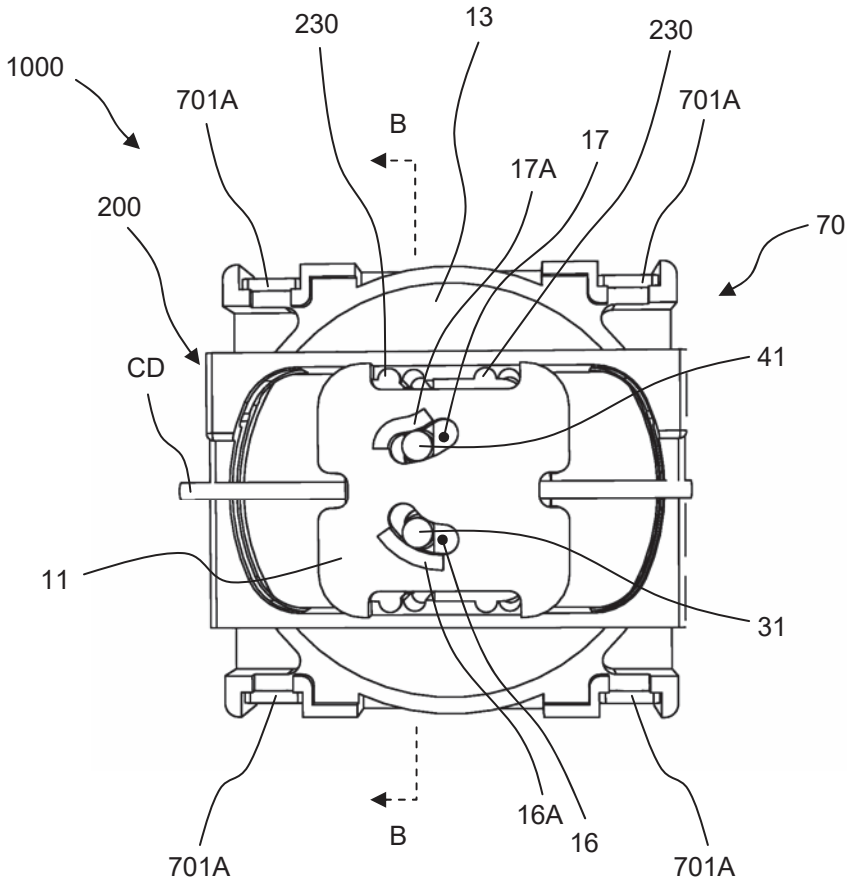

1000
701A
230
13
230
701A
B
17
17A
200
70
CD
41
11
31
16A
16
B
701A
701A

FIG.6A

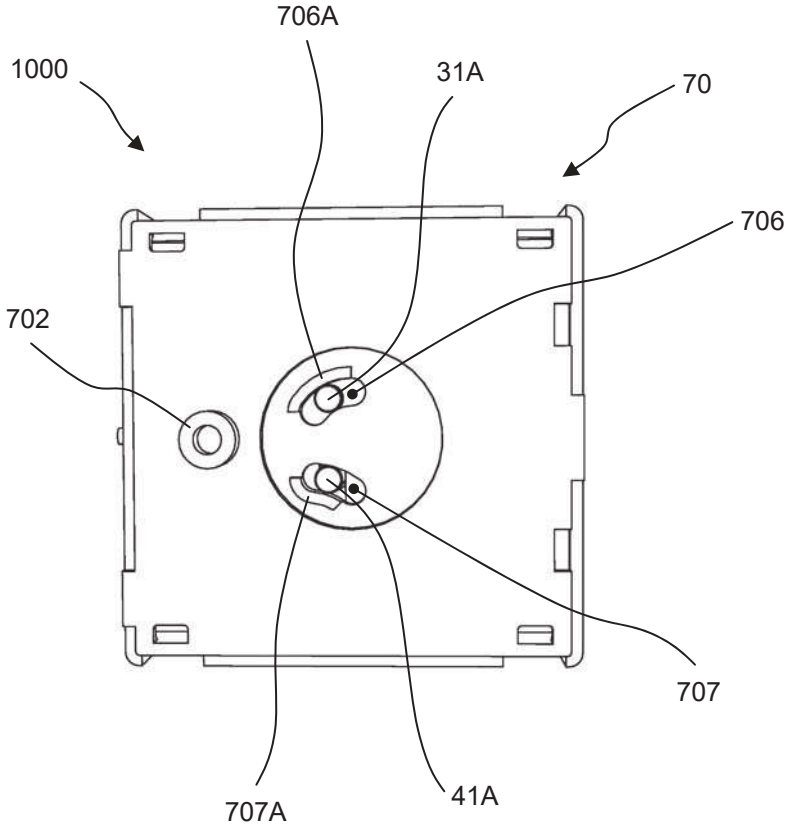

706A
1000
31A
70
706
702
707
707A
41A

FIG. 6B

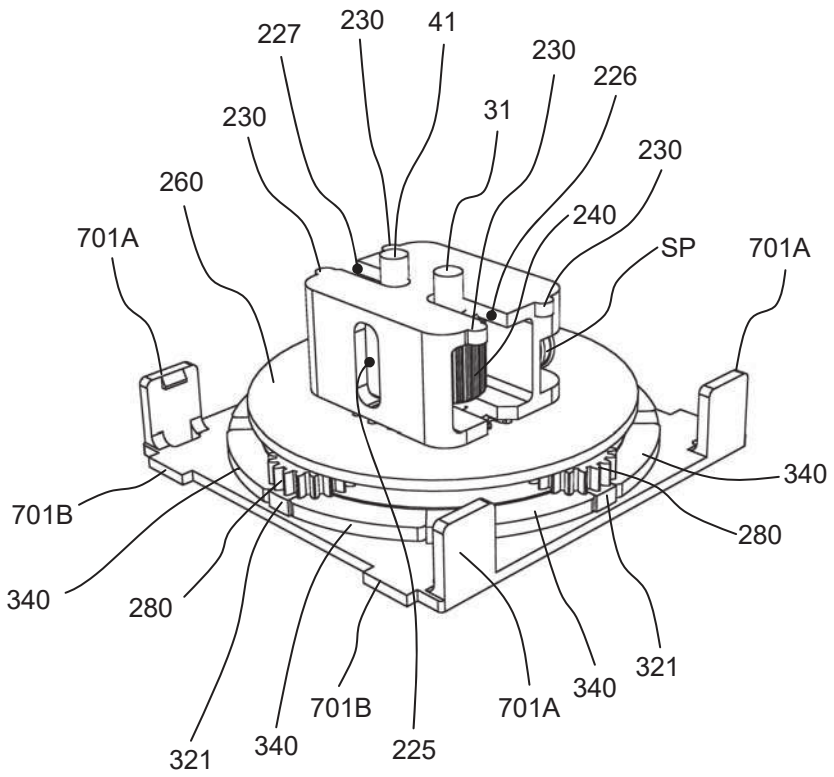

227
230
41
230
226
230
31
230
260
240
701A
SP
701A
340
701B
280
340
280
321
340
701B
225
701A
340
321

FIG.7A

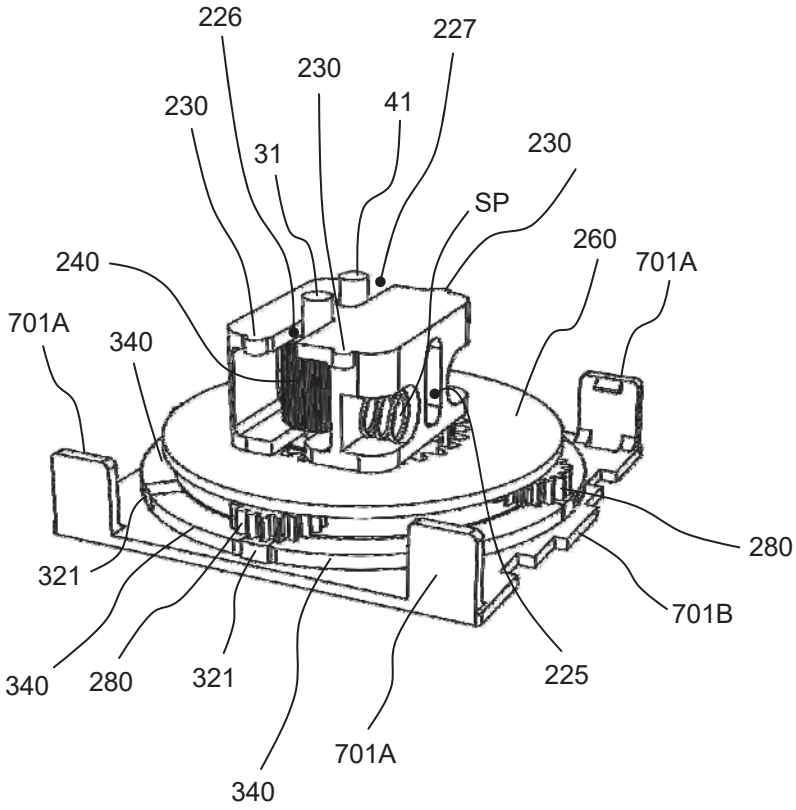

226
227
230
230
41
31
230
SP
260
701A
240
701A
340
280
321
701B
340
280
321
225
701A
340

FIG.7B

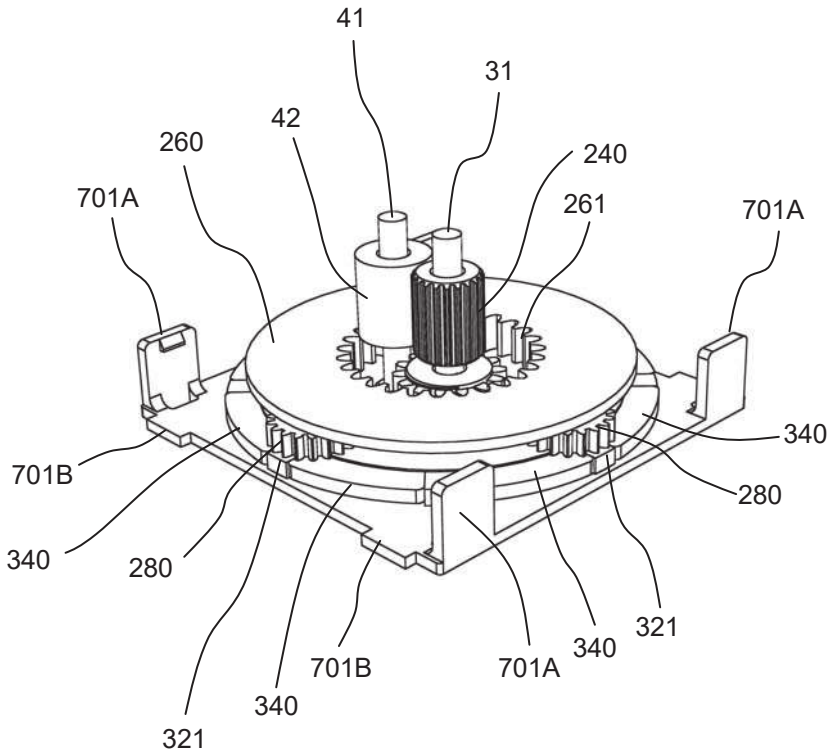

41
31
42
260
240
261
701A
701A
340
701B
280
340
280
321
340
701B
701A
340
321
321

FIG.8A

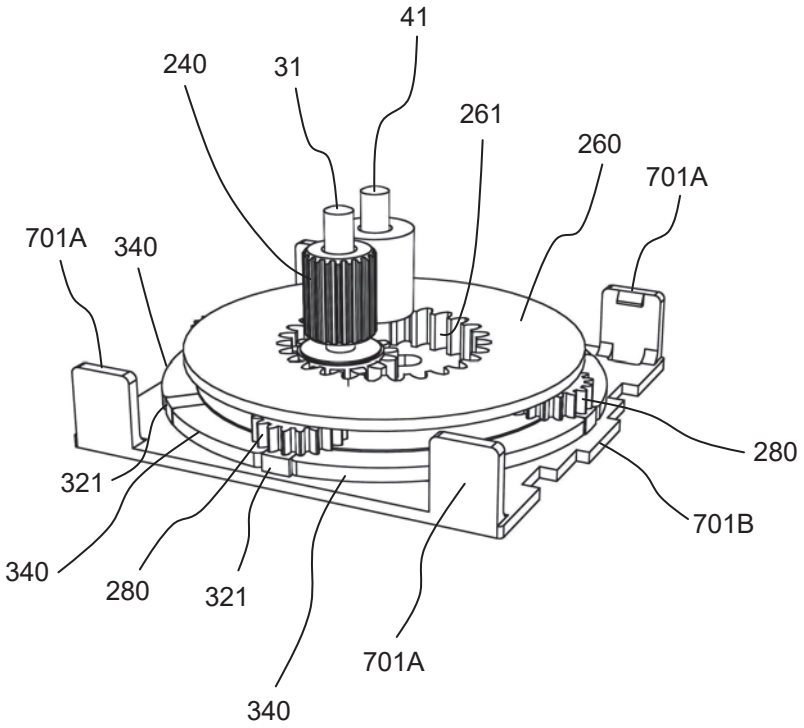

41
240
31
261
260
701A
701A
340
280
321
701B
340
280
321
701A
340

FIG.8B

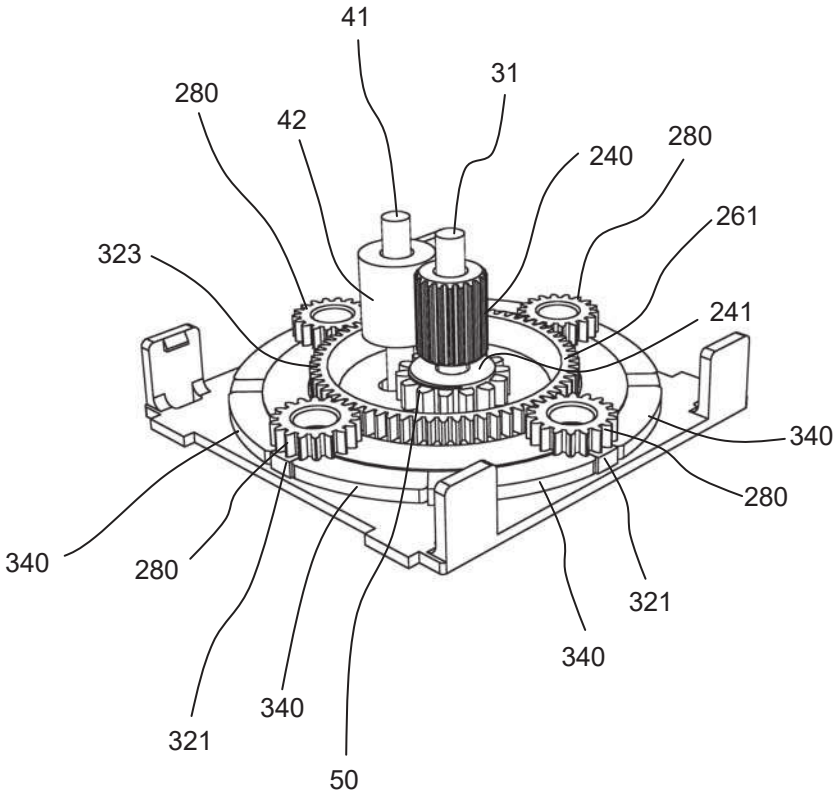

41
31
280
42
240
280
261
323
241
340
280
340
280
321
340
340
321
50

FIG.9A

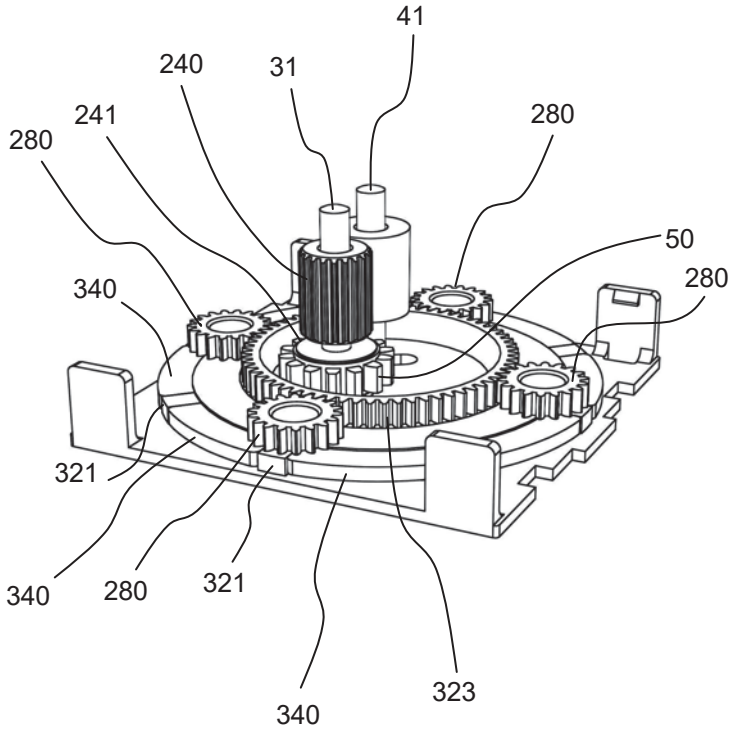
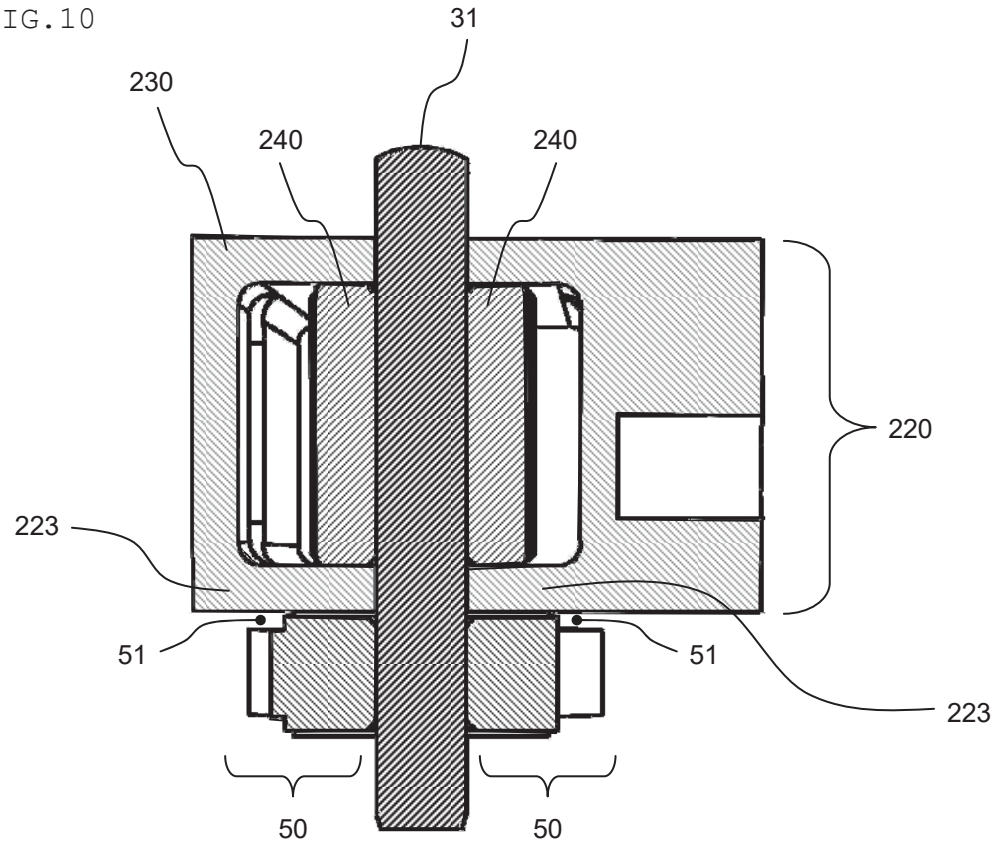

41
240
31
241
280
280
50
280
340
321
340
280
321
340
323

FIG.9B

FIG.10



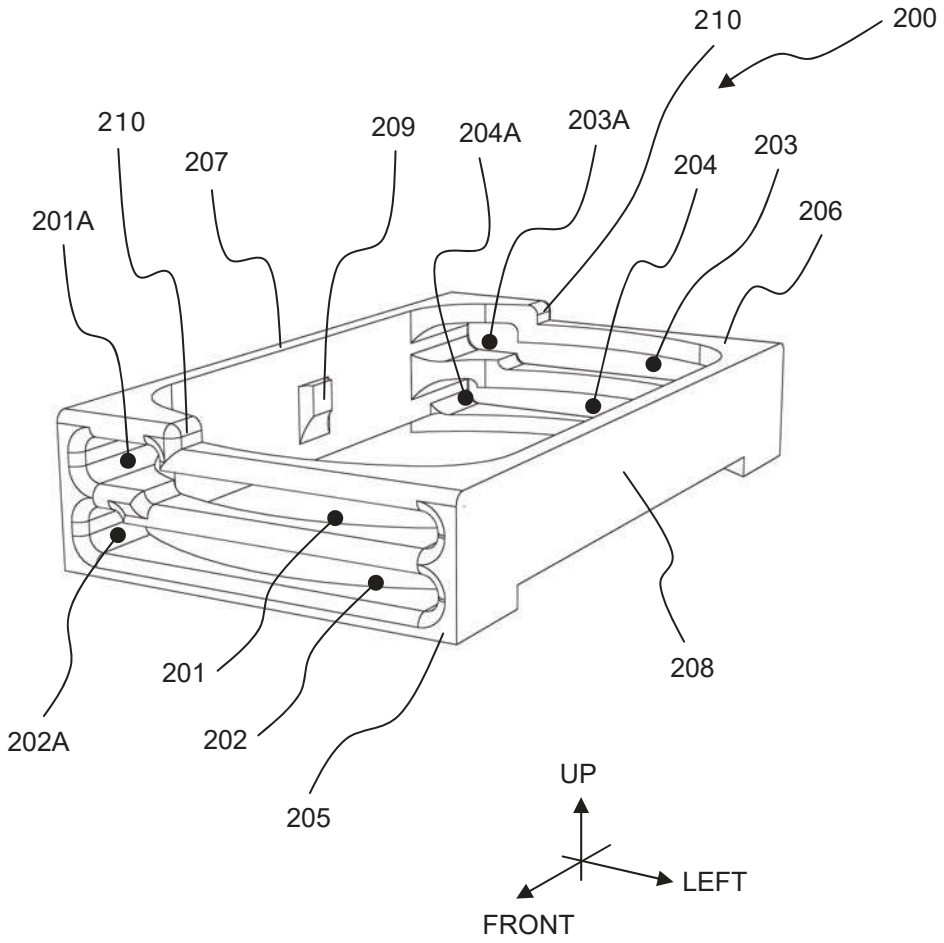


FIG.11A

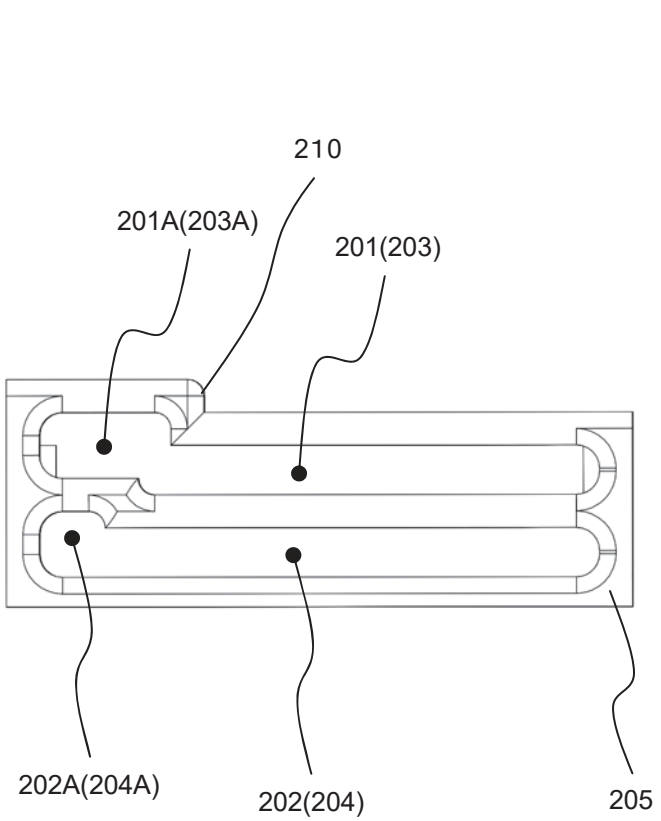


FIG.11B

CASE 10A

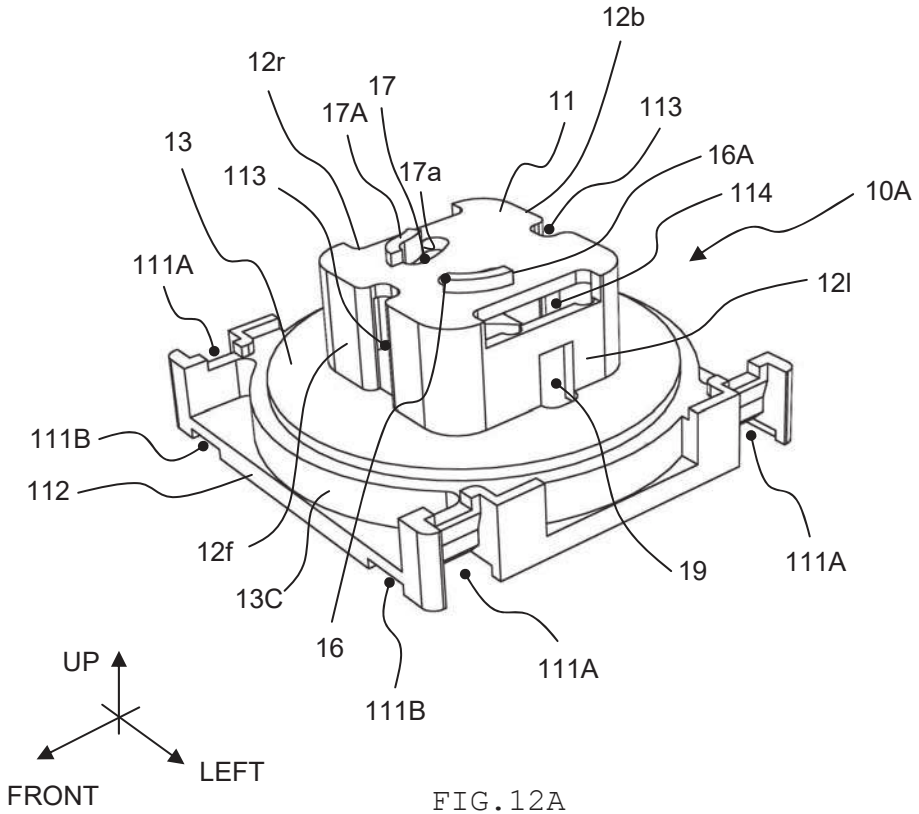


FIG.12A

CASE 10A

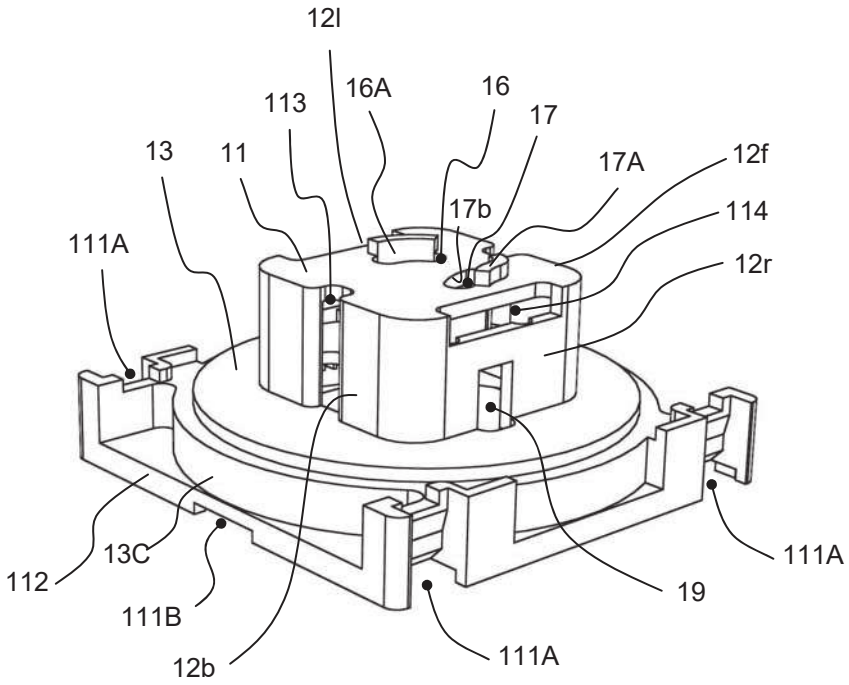


FIG.12B

CASE 10A

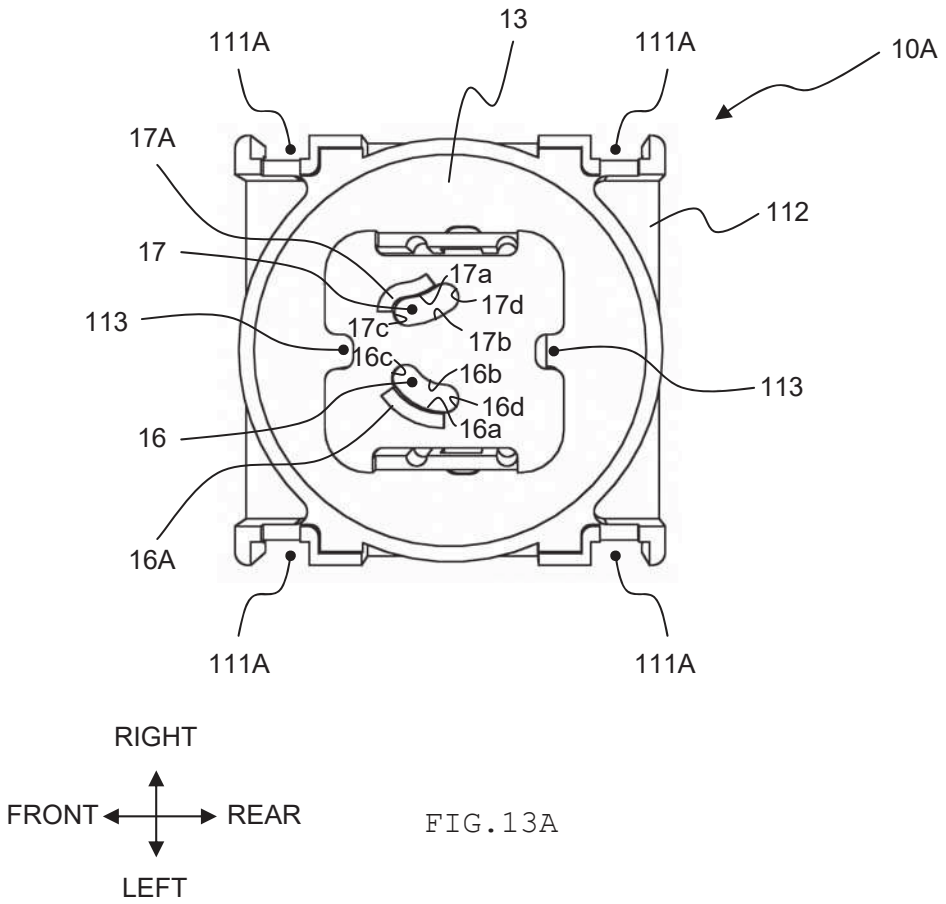


FIG.13A

CASE 10A

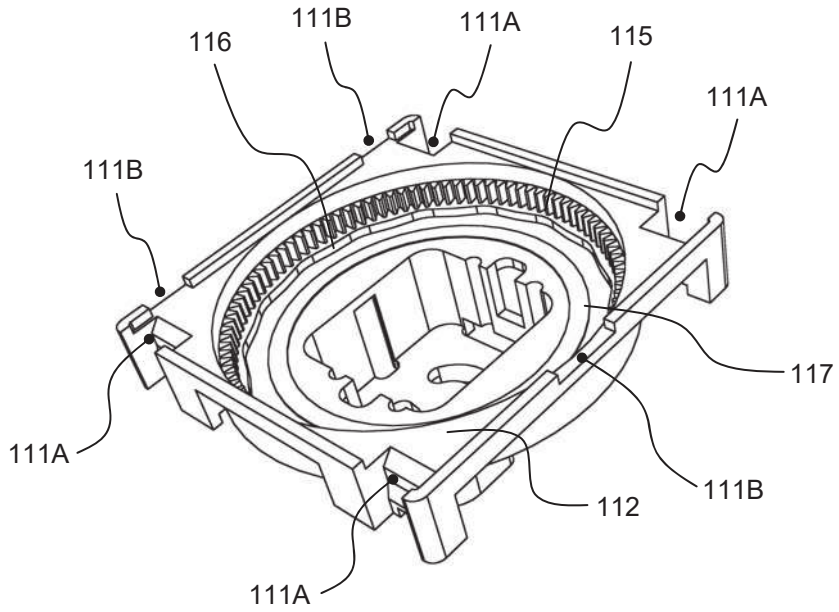


FIG.13B

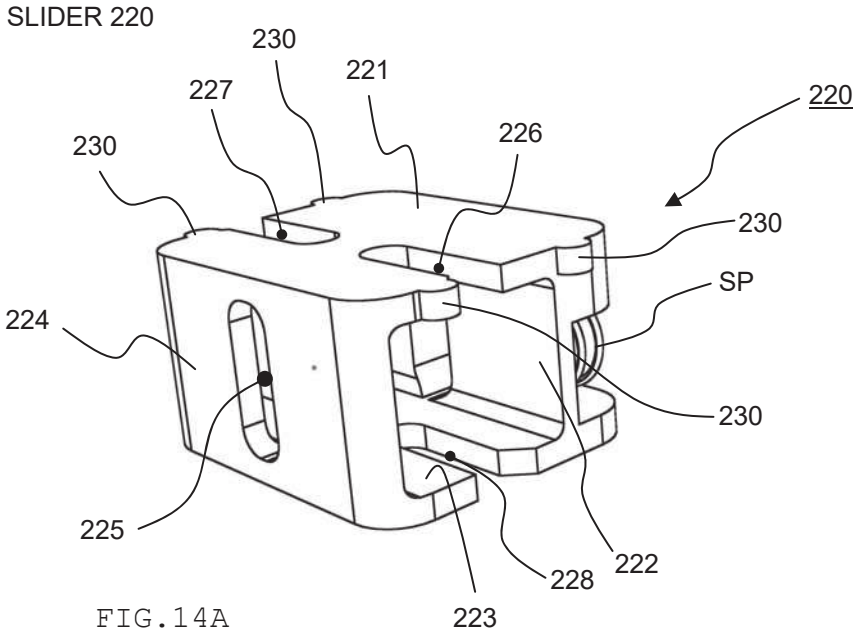


FIG.14A

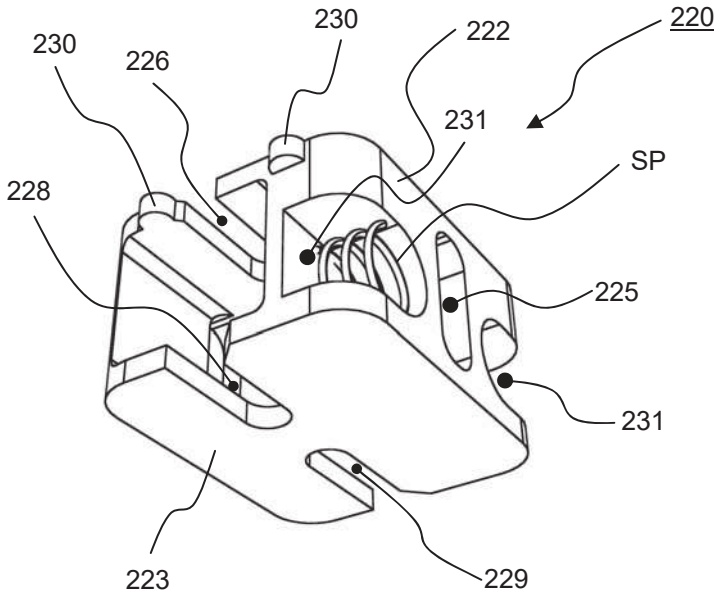


FIG.14B

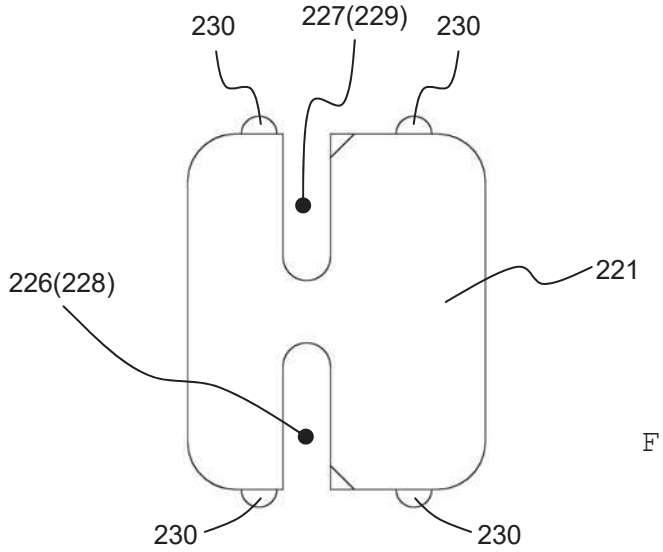


FIG.14C

CASE 10A & SLIDER 220

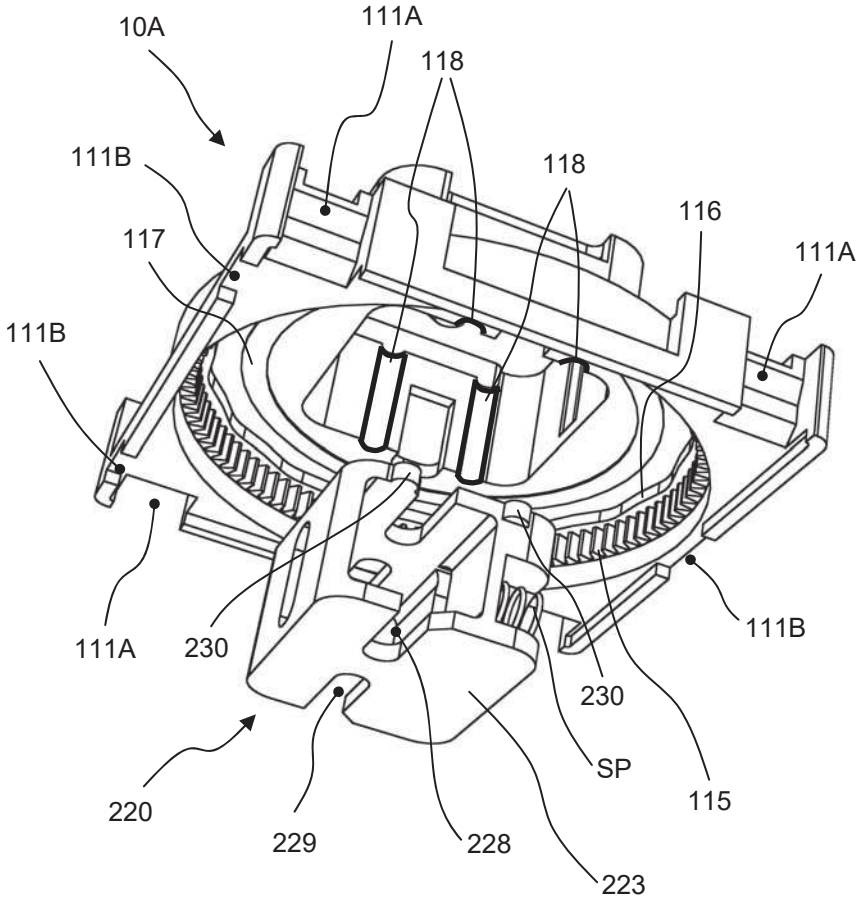


FIG.15A

CASE 10A & SLIDER 220

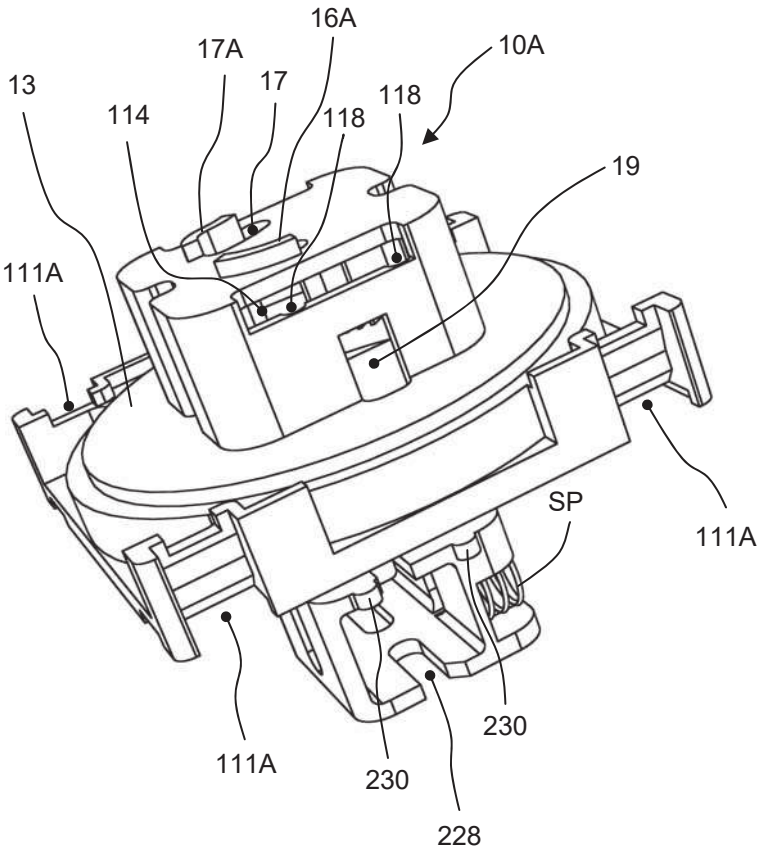


FIG.15B

MEMBERS OTHER THAN CASE 10A & SLIDER 220

FIG.16

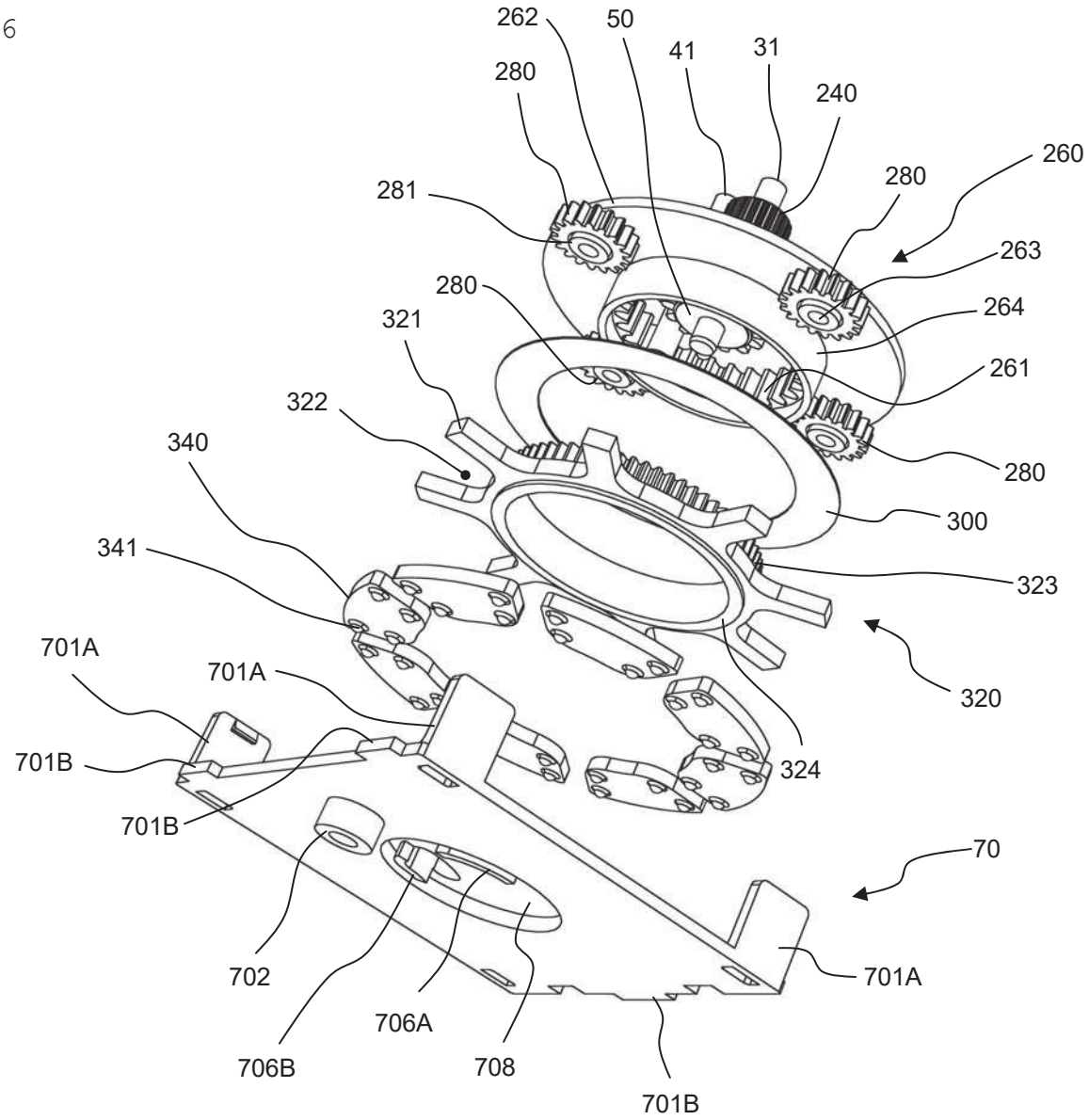
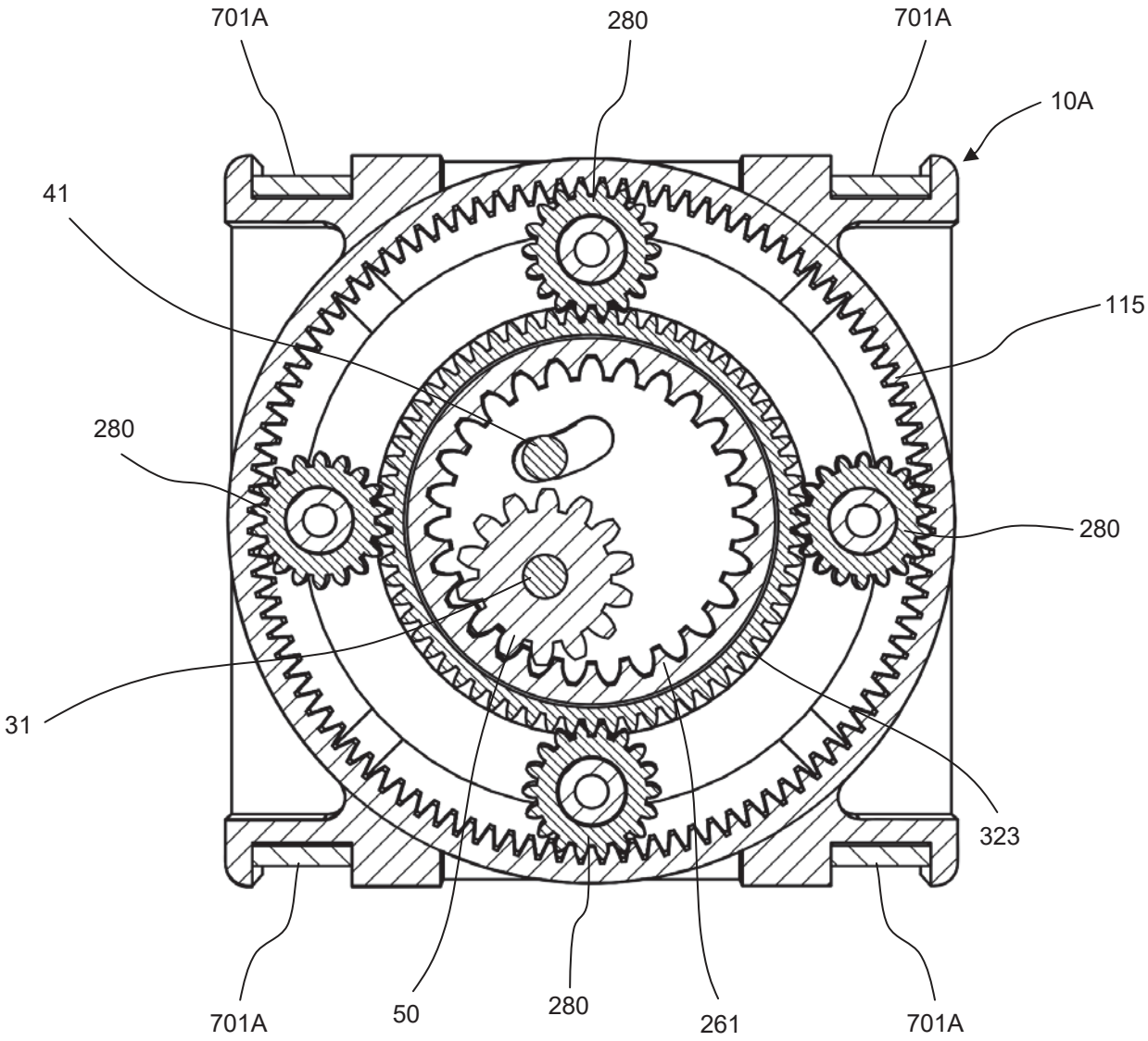
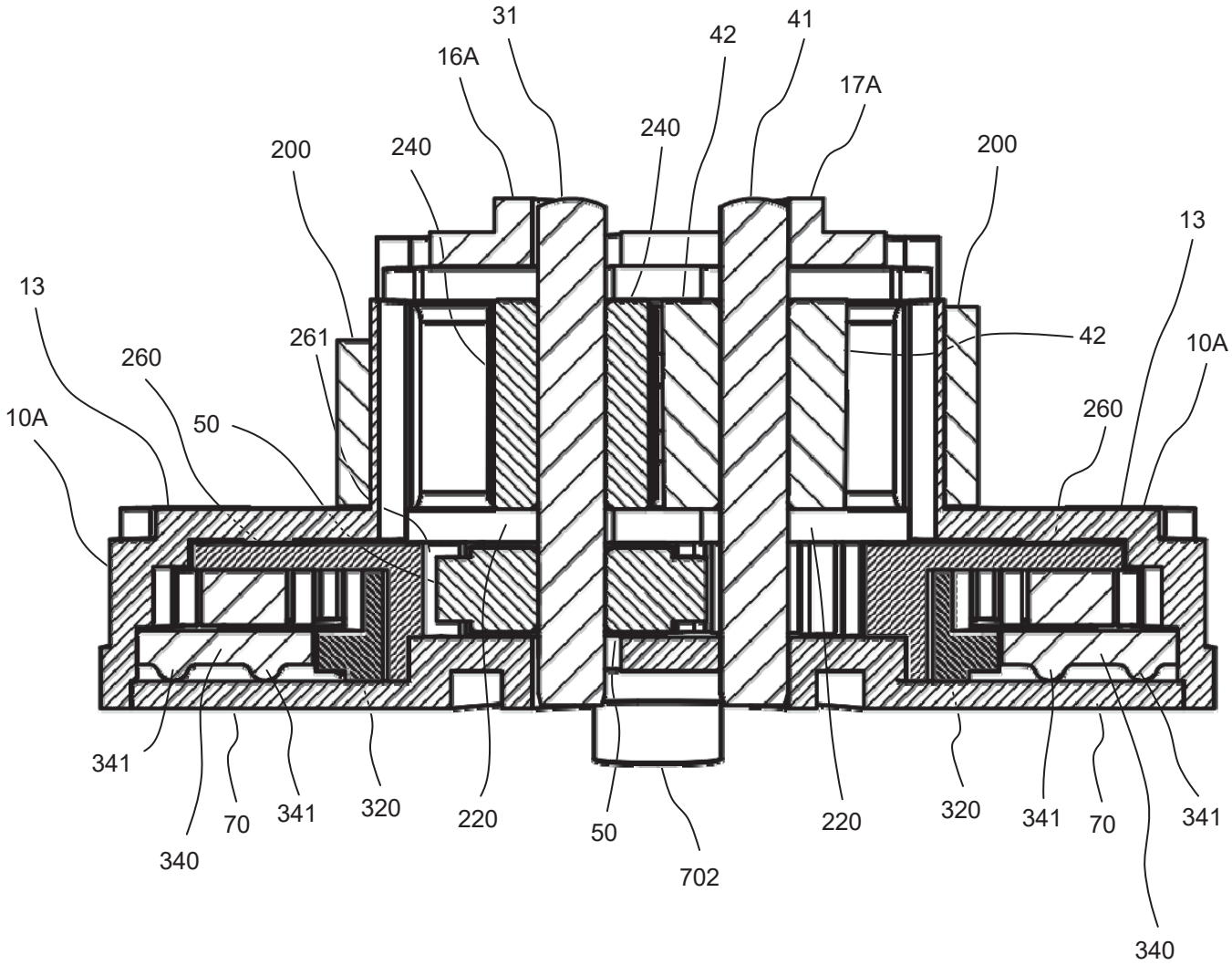


FIG.17



LINE A-A SECTIONAL VIEW

FIG.18



LINE B-B SECTIONAL VIEW

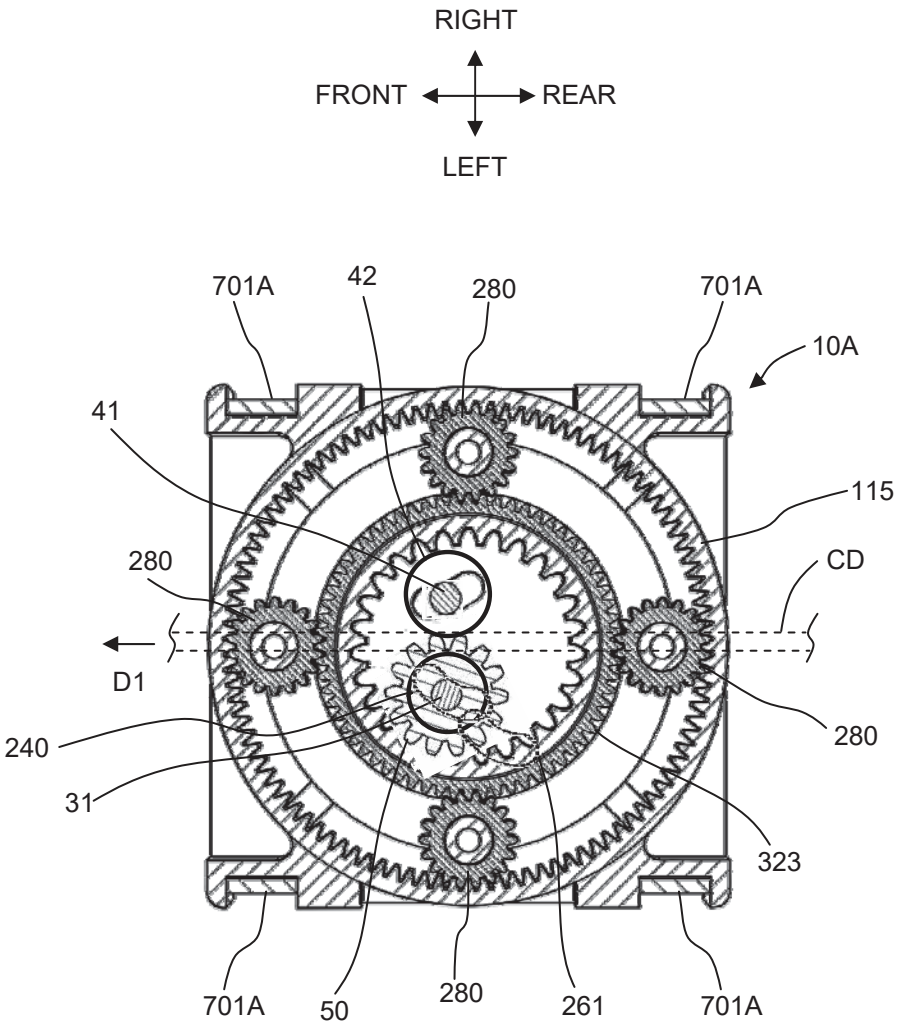


FIG. 19A

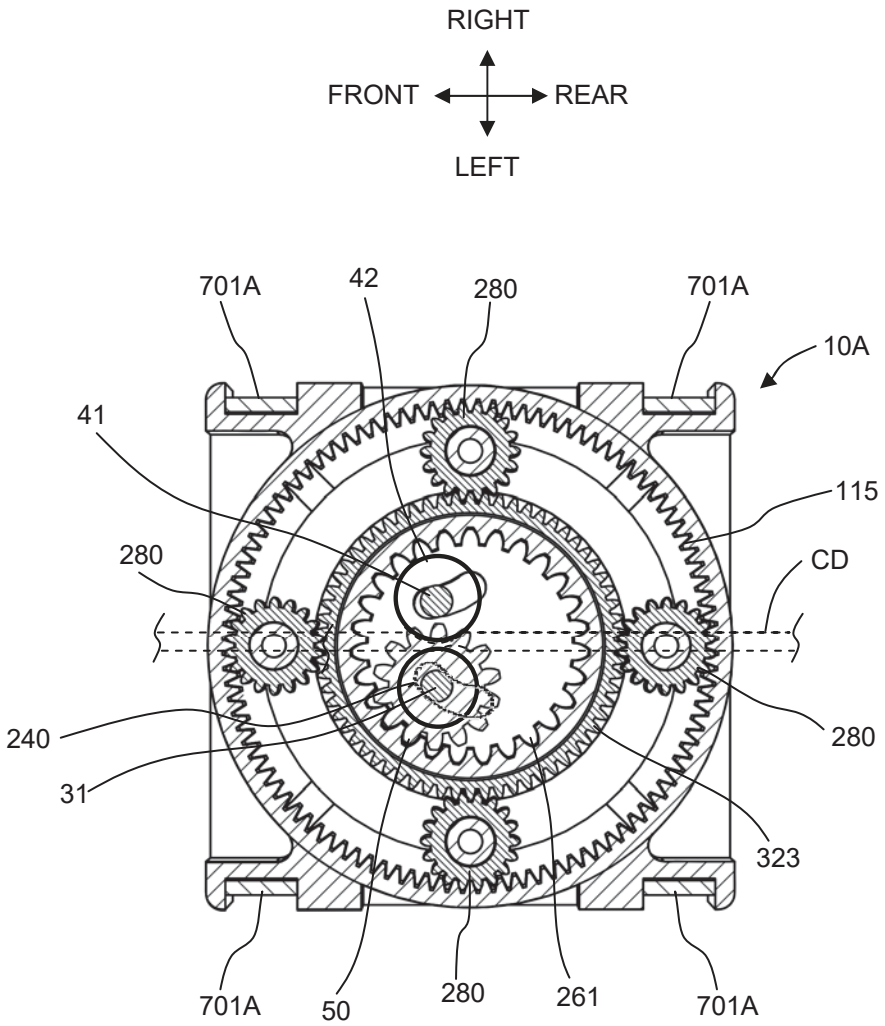


FIG.19B

FIG. 19C

ROTATION DIRECTIONS OF MEMBERS

	Front-Rear	Left-Right	Rotation	Revolution
Pinion gear 50	←	↑	↻	↺
Internal gear 261	-	-	↺	-
Planetary gear 280	-	-	↺	↻
Sun gear 323	-	-	↻	-
Inner gear115	-	-	-	-

FIG. 20

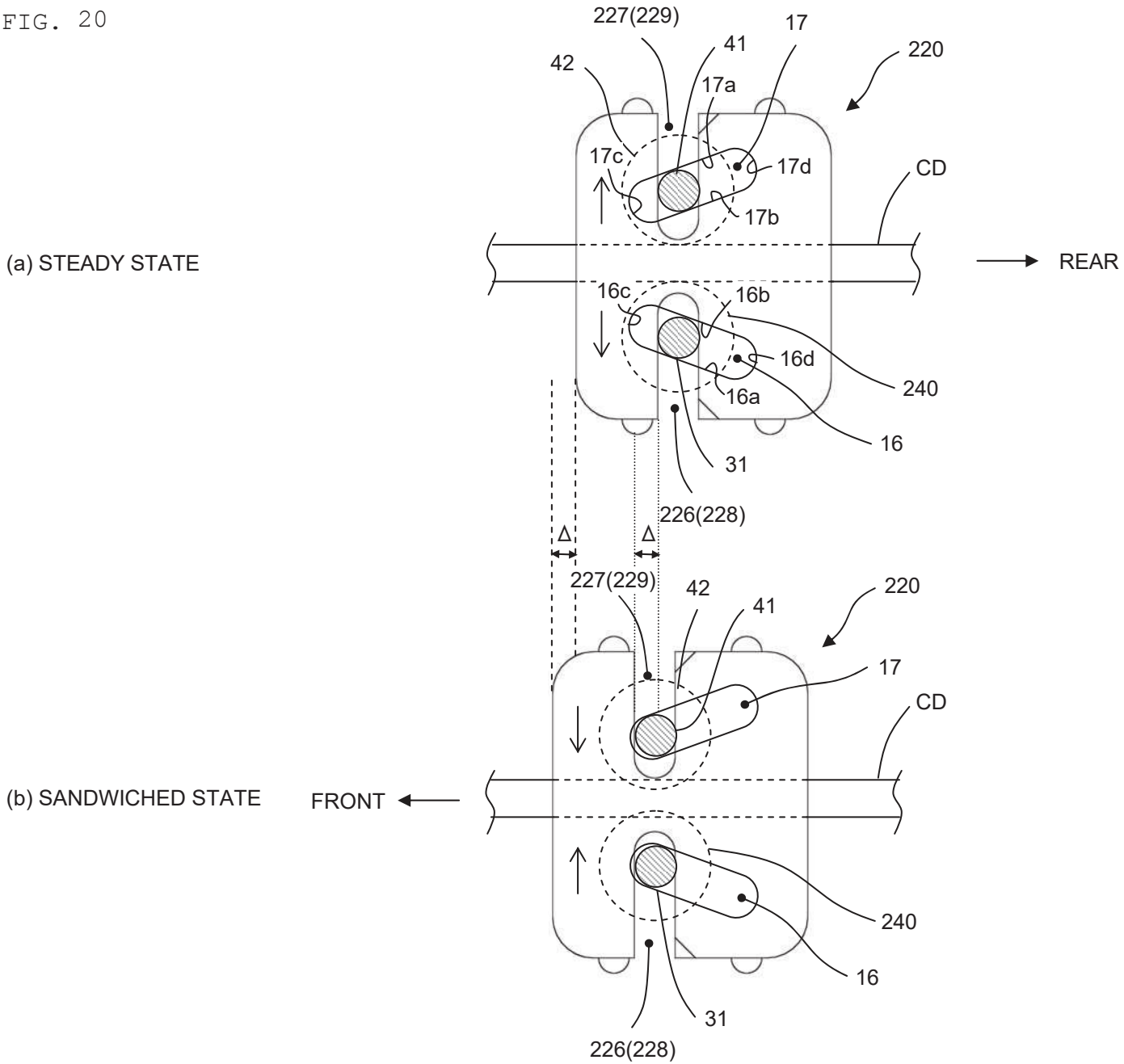

(a) STEADY STATE
227(229)
41
17
42
220
17a
17c
17d
CD
17b
REAR
16c
16b
16d
240
16a
16
31
226(228)
Δ
Δ
227(229)
42
41
220
17
CD
(b) SANDWICHED STATE
FRONT
240
16
31
226(228)

FIG.21

