DRAWINGS

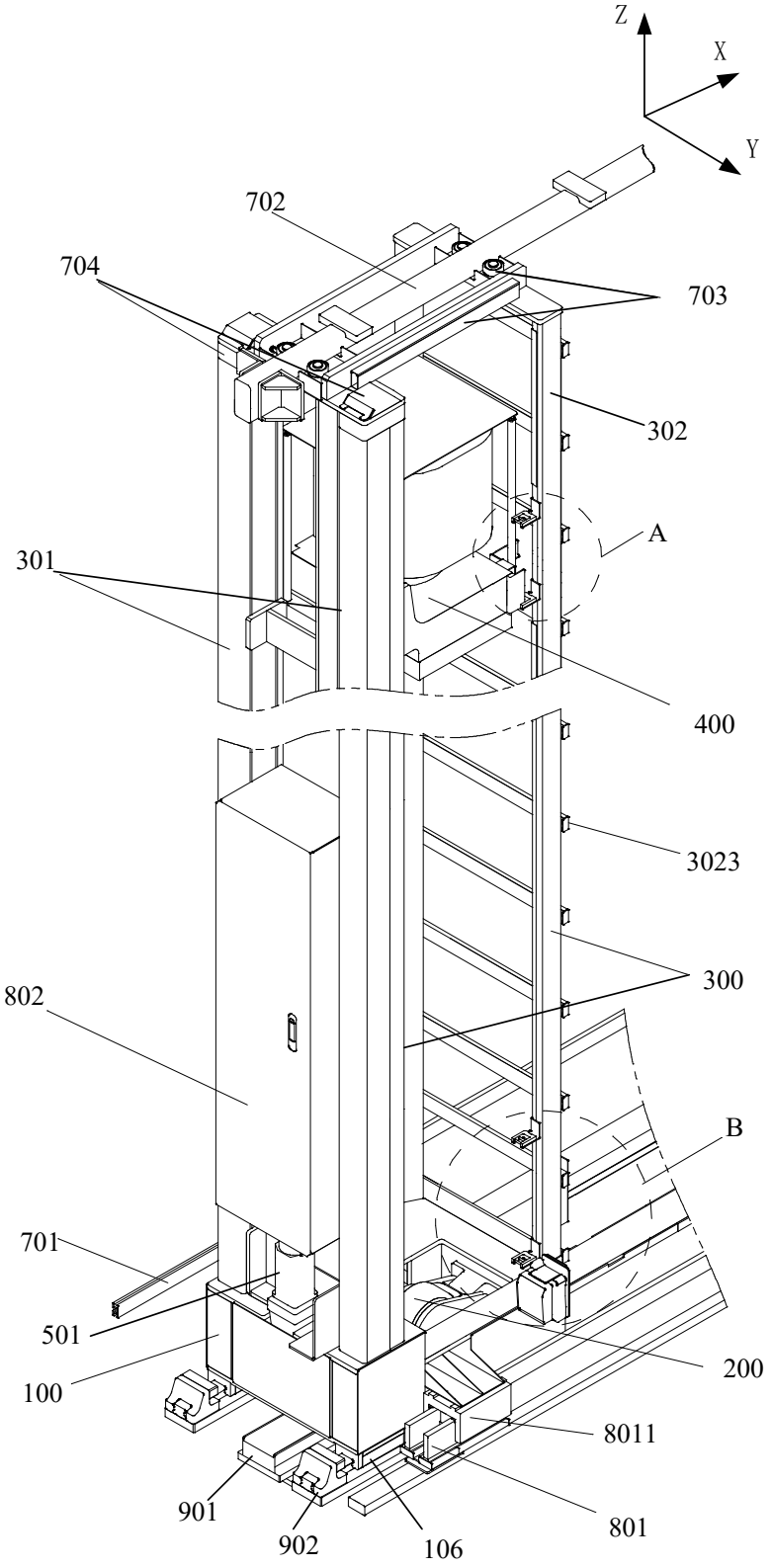


FIG. 1

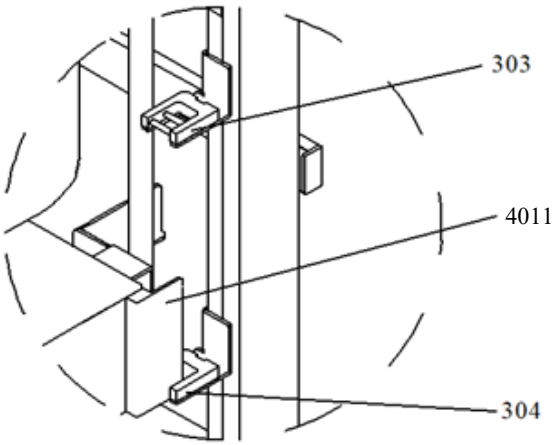


FIG. 2

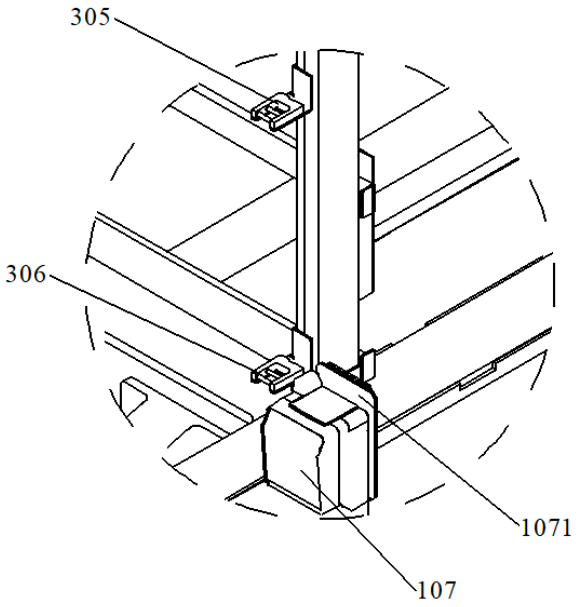


FIG. 3

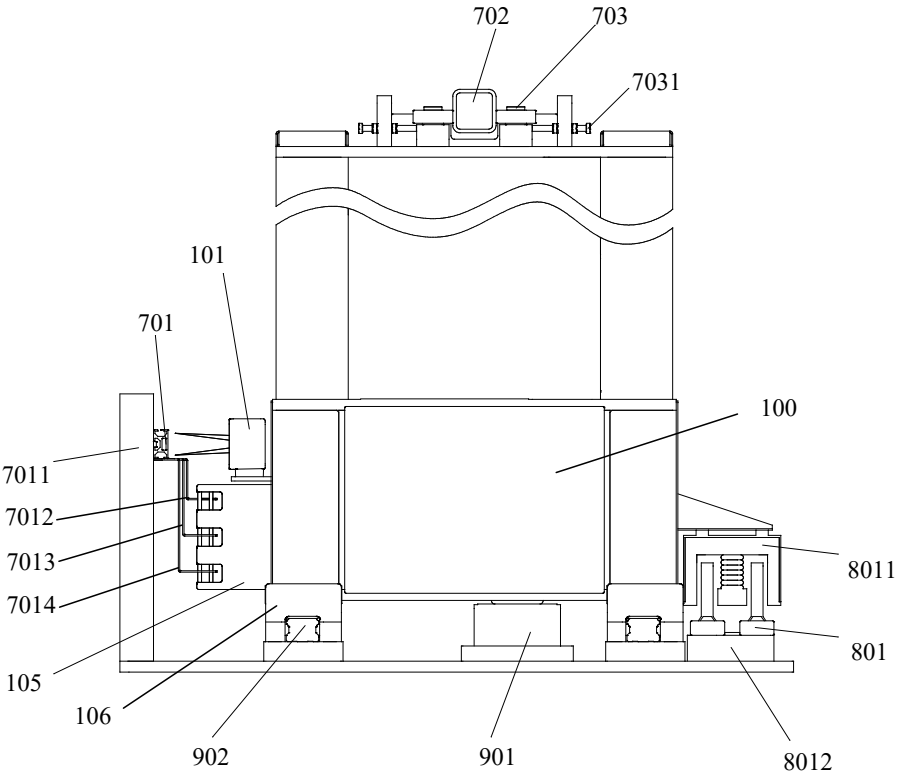

702
703
7031
101
701
100
7011
7012
7013
7014
8011
801
105
106
902
901
8012

FIG. 4

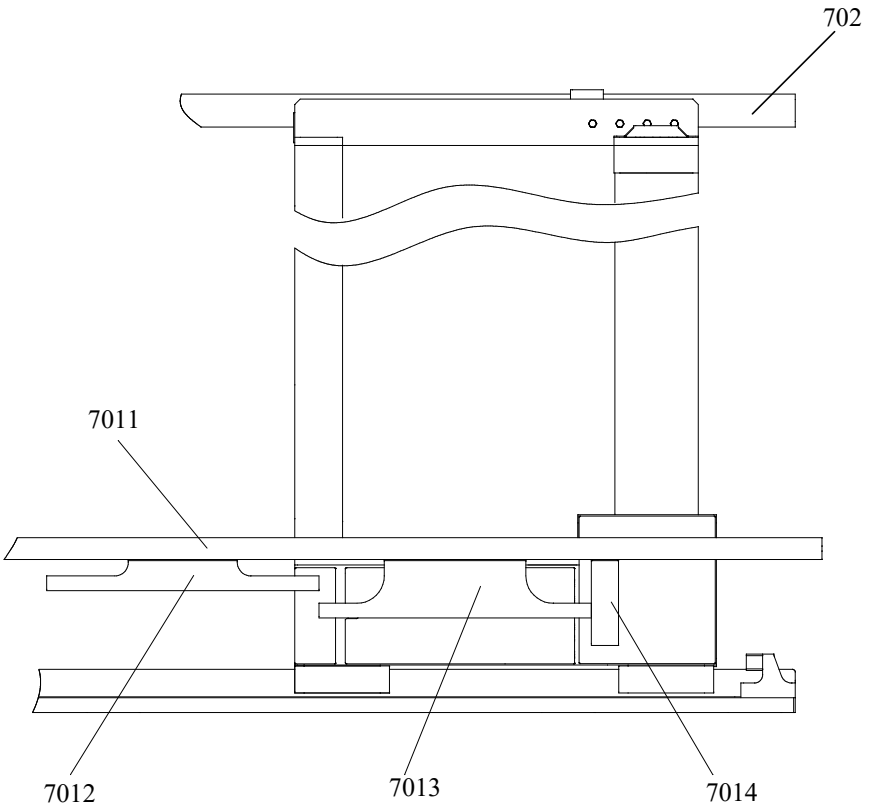

702
7011
7012
7013
7014

FIG. 5

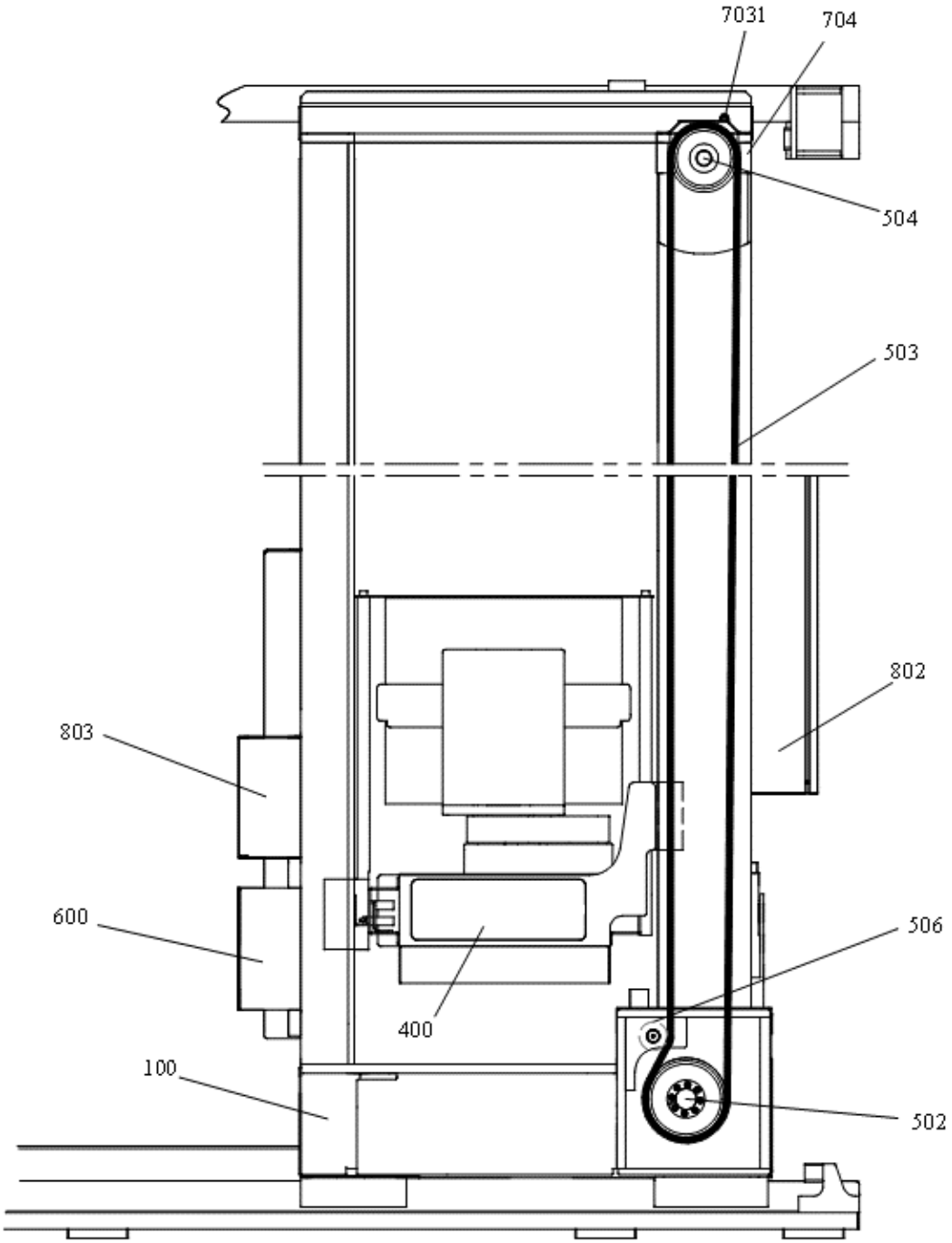


FIG. 6

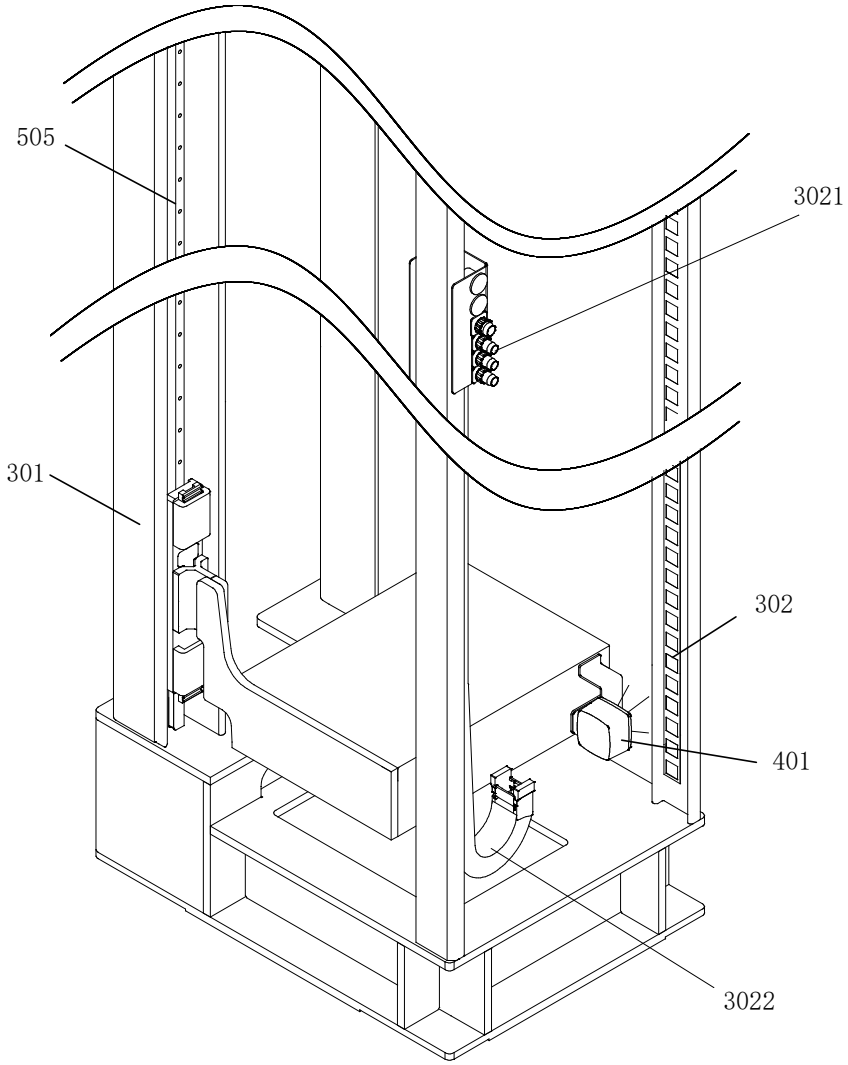


FIG. 7

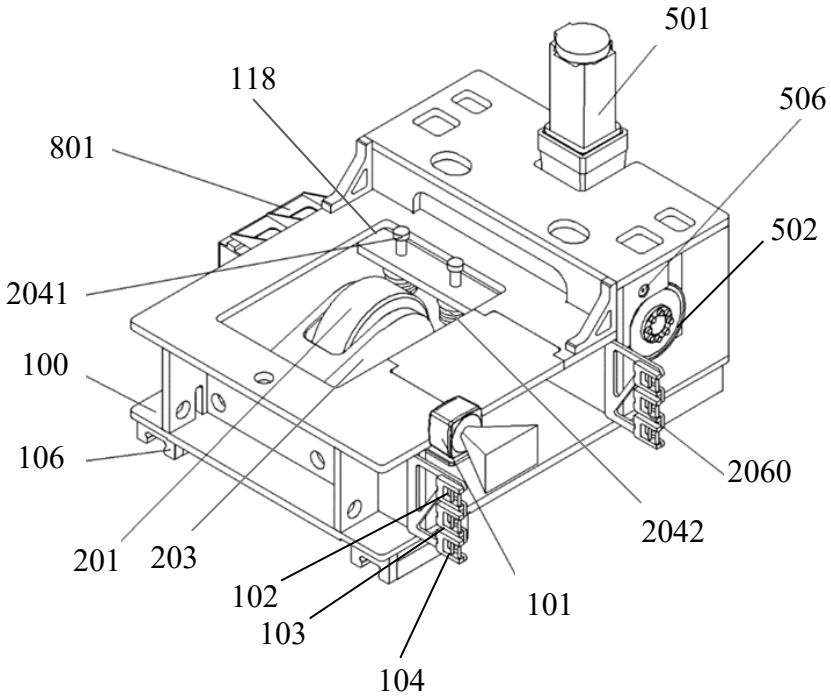

501
118
506
801
502
2041
100
106
2060
2042
201
203
102
101
103
104

FIG. 8A

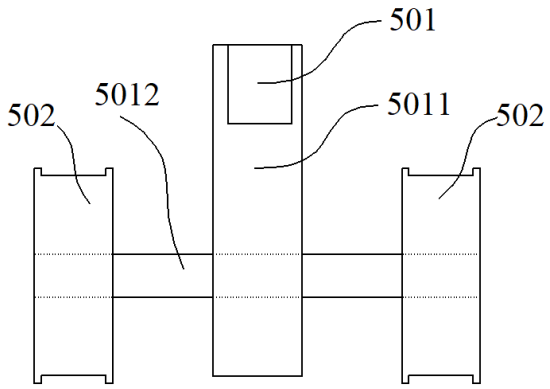

501
5012
5011
502
502

FIG. 8B

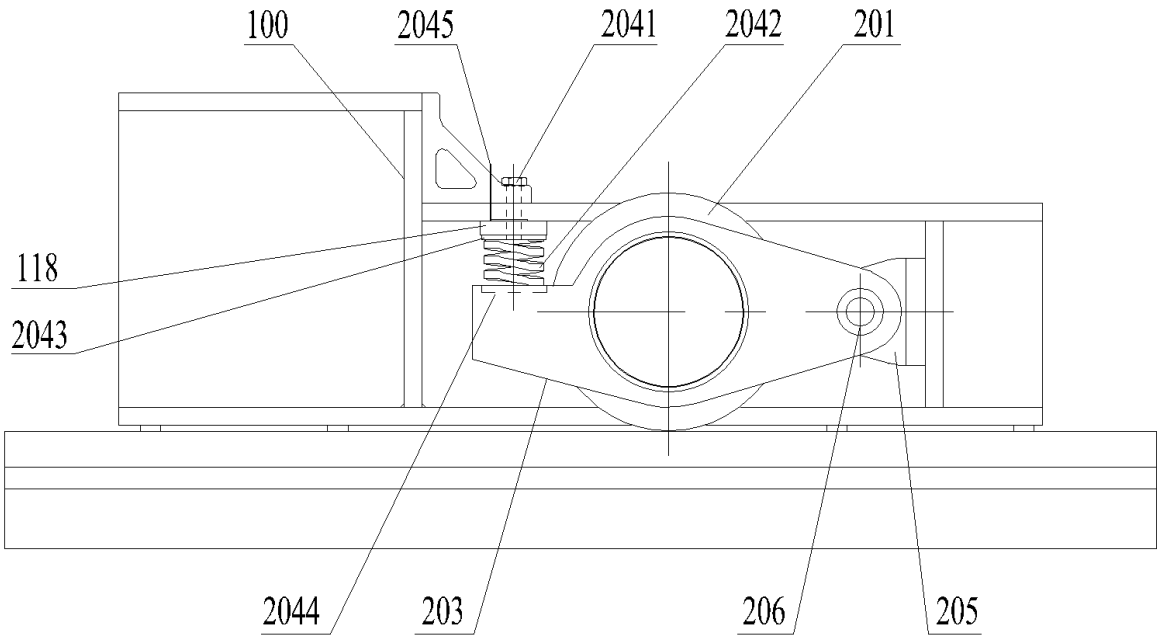

100
2045
2041
2042
201
118
2043
2044
203
206
205

FIG. 9

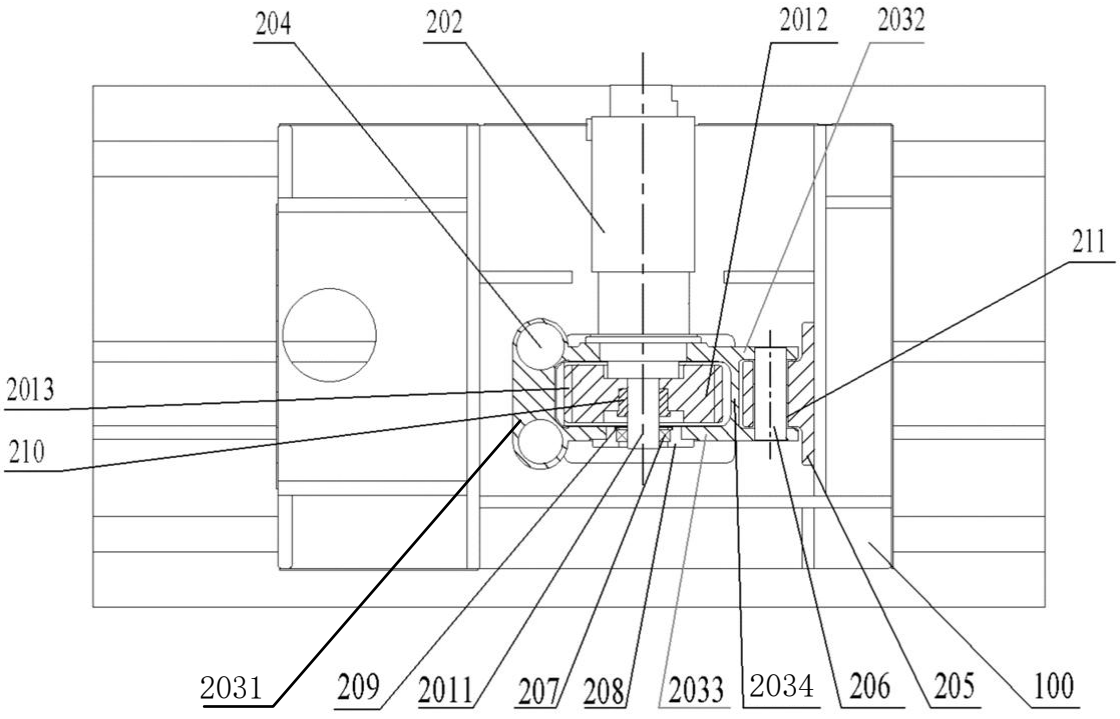

204
202
2012
2032
211
2013
210
2031
209
2011
207
208
2033
2034
206
205
100

FIG. 10

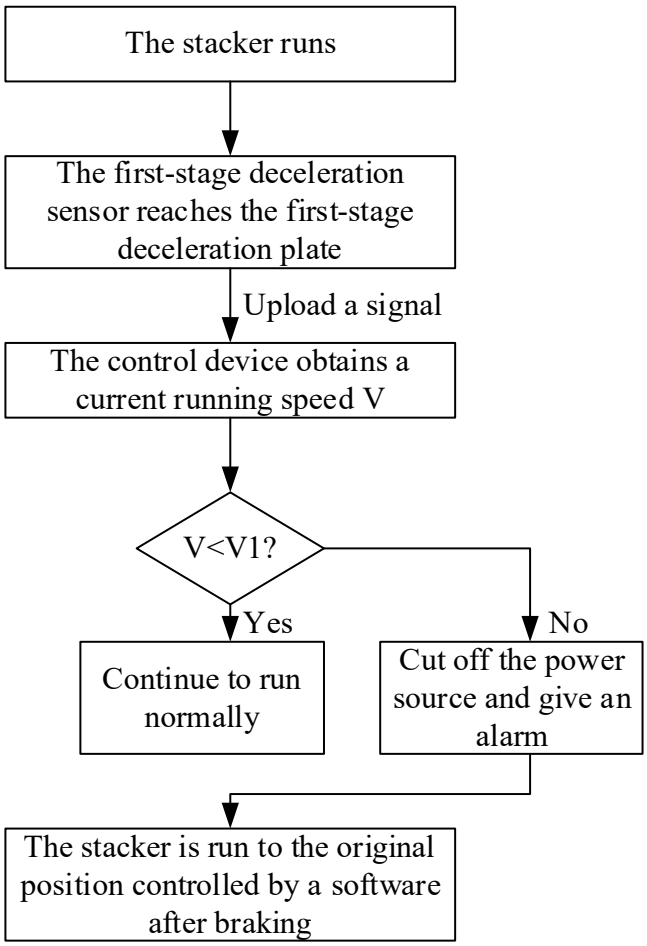

The stacker runs
The first-stage deceleration sensor reaches the first-stage deceleration plate
Upload a signal
The control device obtains a current running speed V
V<V1?
Yes
No
Continue to run normally
Cut off the power source and give an alarm
The stacker is run to the original position controlled by a software after braking

FIG. 11

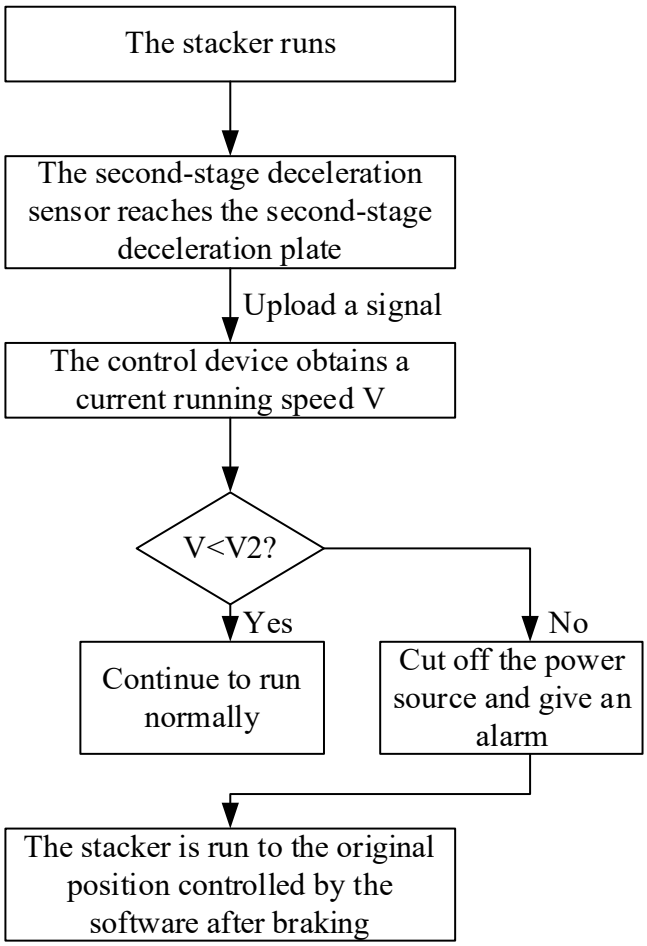

The stacker runs
The second-stage deceleration sensor reaches the second-stage deceleration plate
Upload a signal
The control device obtains a current running speed V
V<V2?
Yes
No
Continue to run normally
Cut off the power source and give an alarm
The stacker is run to the original position controlled by the software after braking

FIG. 12

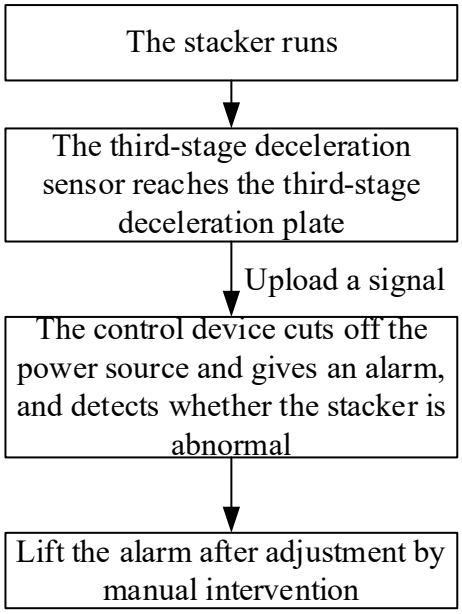

The stacker runs
The third-stage deceleration sensor reaches the third-stage deceleration plate
Upload a signal
The control device cuts off the power source and gives an alarm, and detects whether the stacker is abnormal
Lift the alarm after adjustment by manual intervention

FIG. 13

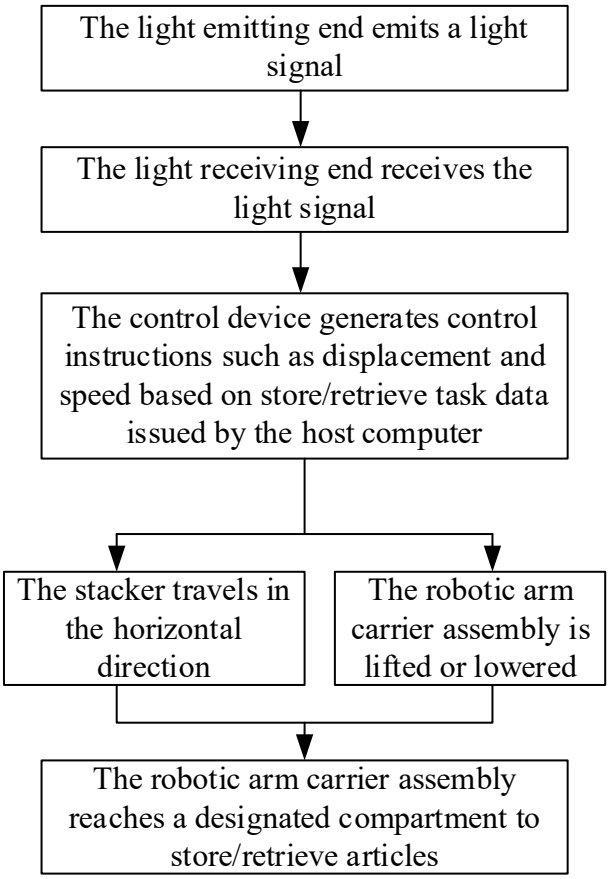

The light emitting end emits a light signal
The light receiving end receives the light signal
The control device generates control instructions such as displacement and speed based on store/retrieve task data issued by the host computer
The stacker travels in the horizontal direction
The robotic arm carrier assembly is lifted or lowered
The robotic arm carrier assembly reaches a designated compartment to store/retrieve articles

FIG. 14

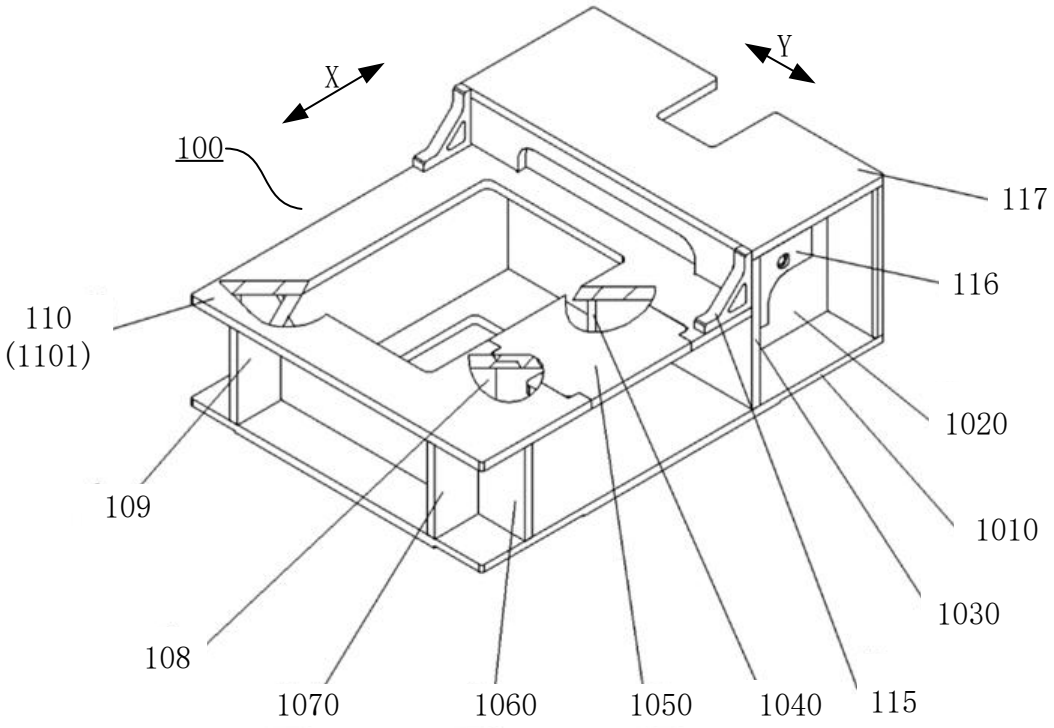

X
Y
100
117
116
110
(1101)
1020
109
1010
1030
108
1070
1060
1050
1040
115

FIG. 15

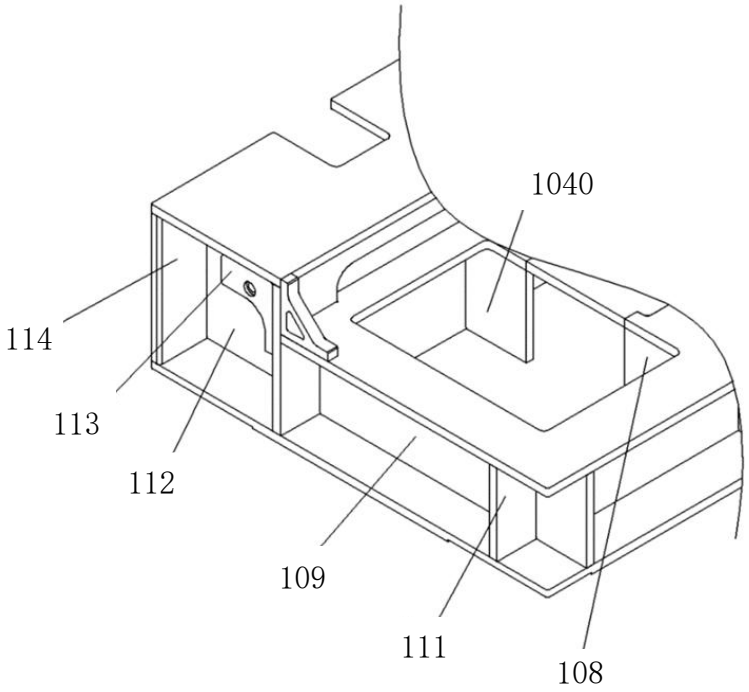

1040
114
113
112
109
111
108

FIG. 16

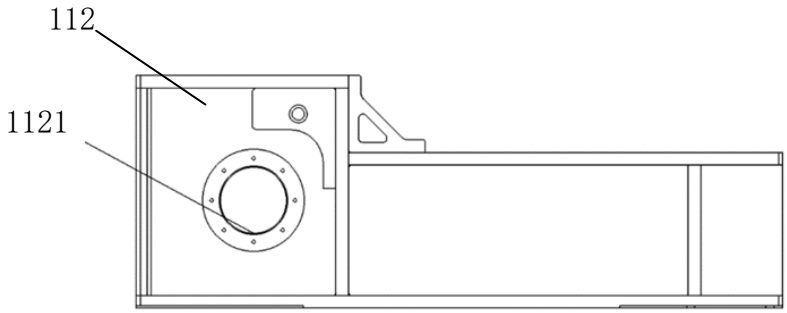


FIG. 17

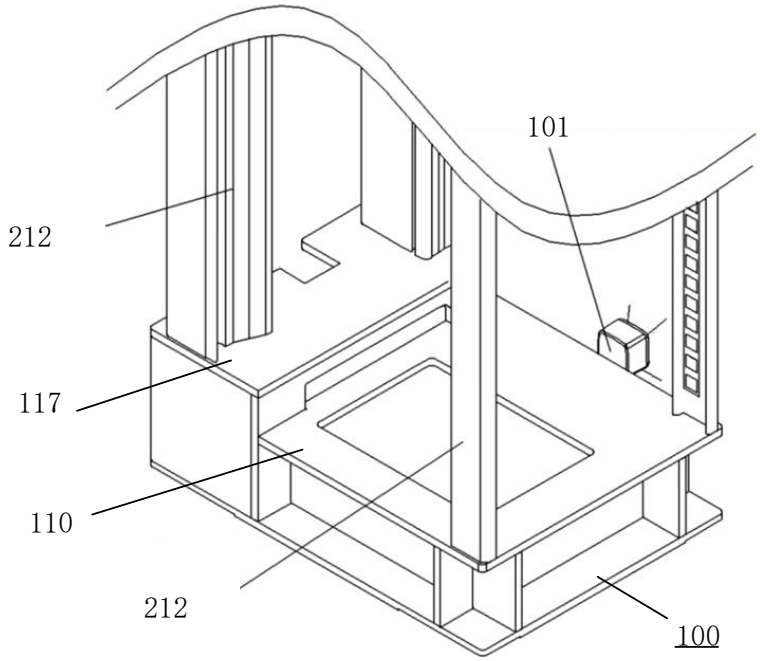


FIG. 18

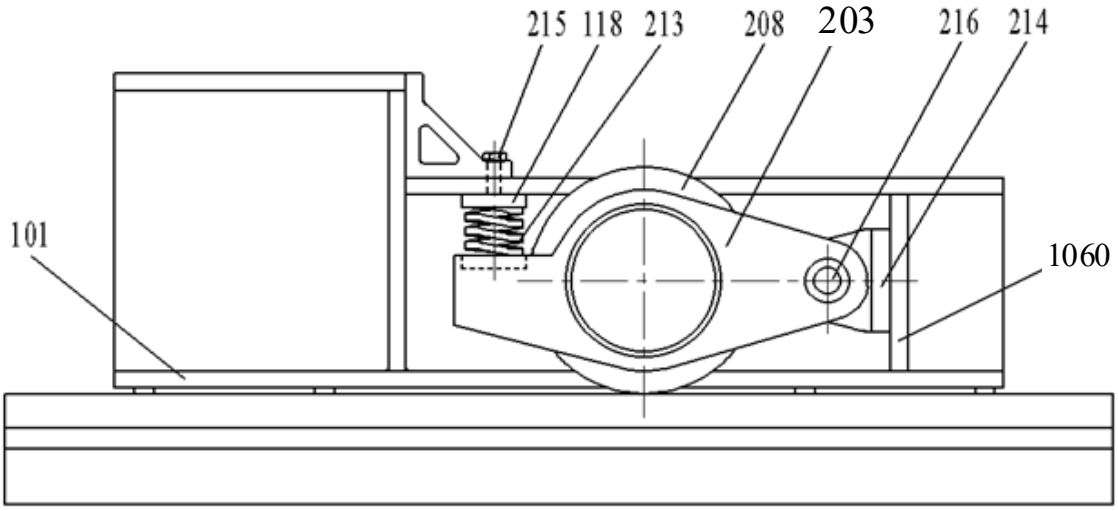

215
118
213
208
203
216
214
101
1060

FIG. 19

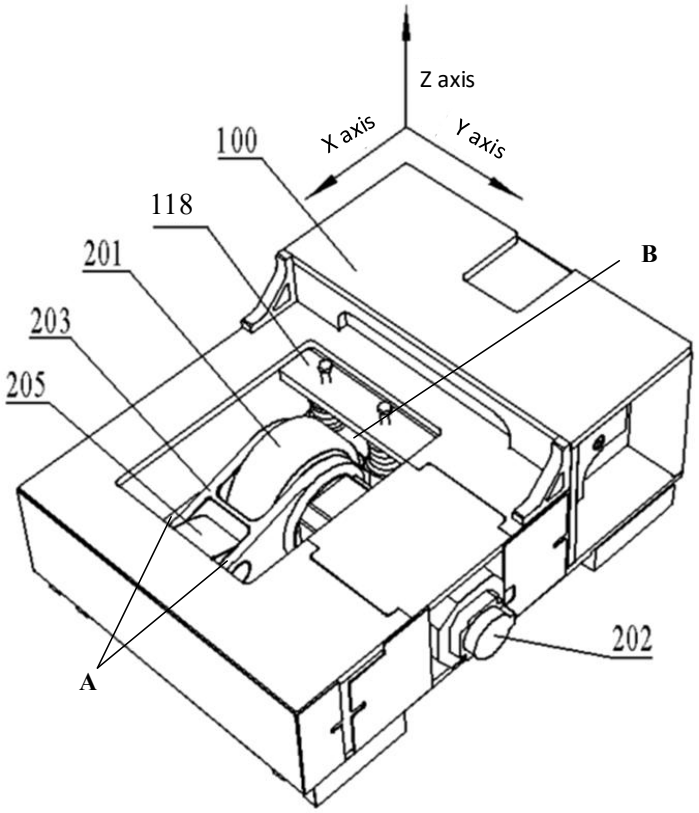

Z axis
X axis
Y axis
100
118
201
203
205
B
A
202

FIG. 20

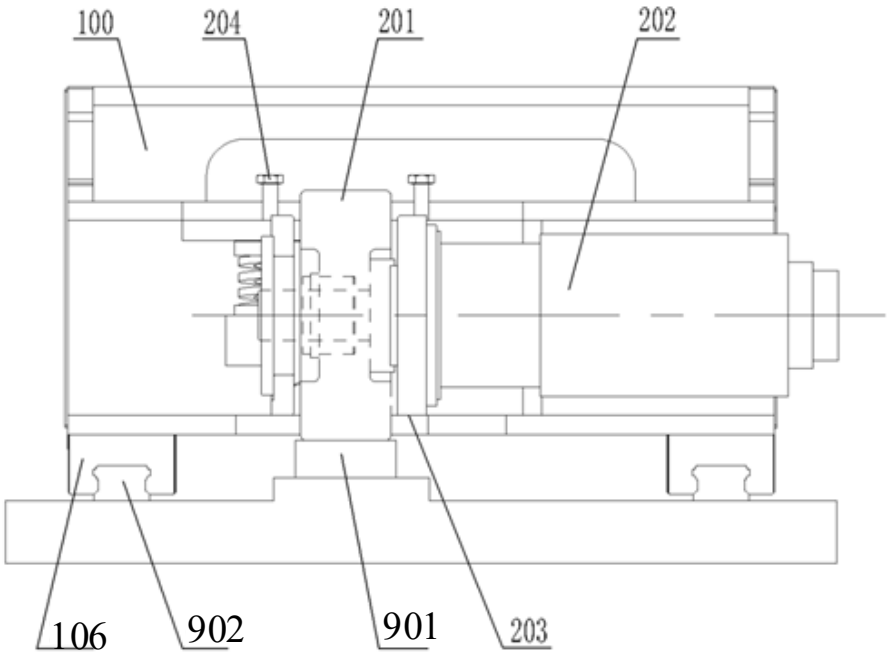


FIG. 21

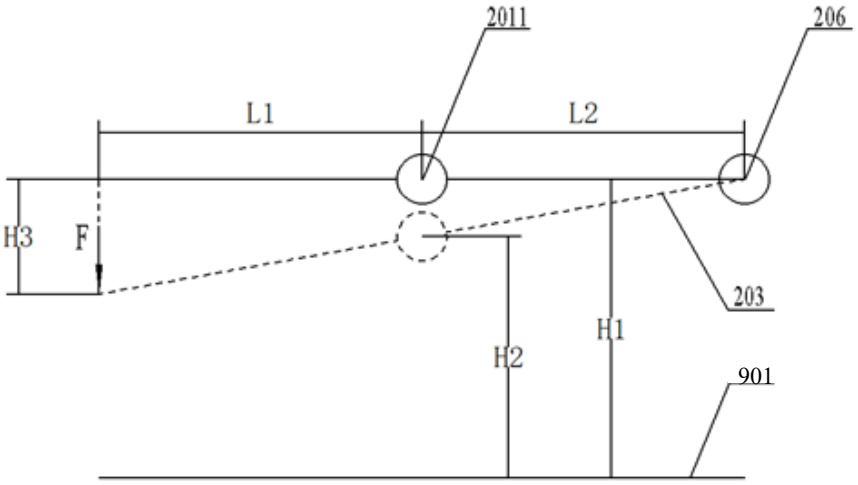


FIG. 22

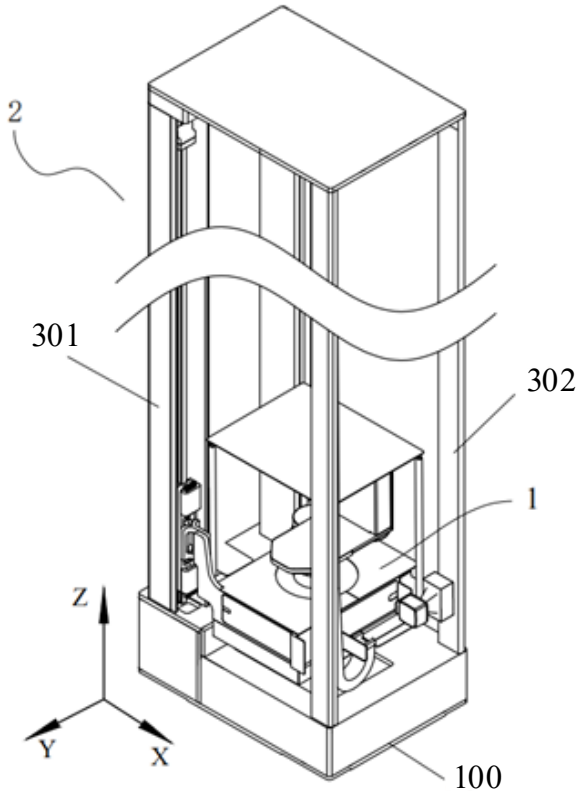


FIG. 23

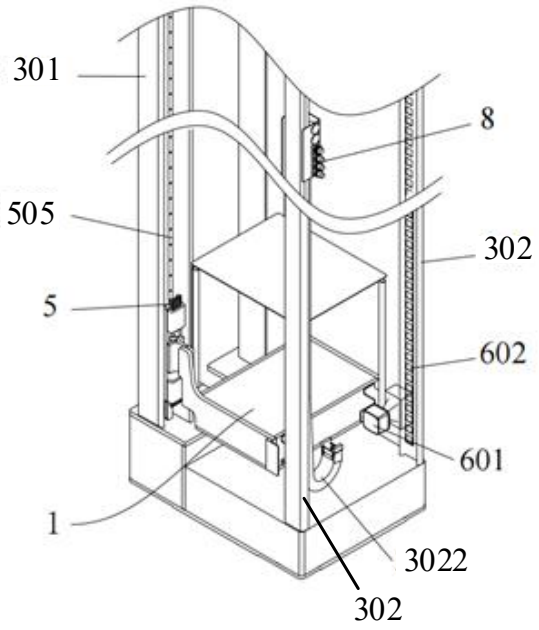


FIG. 24

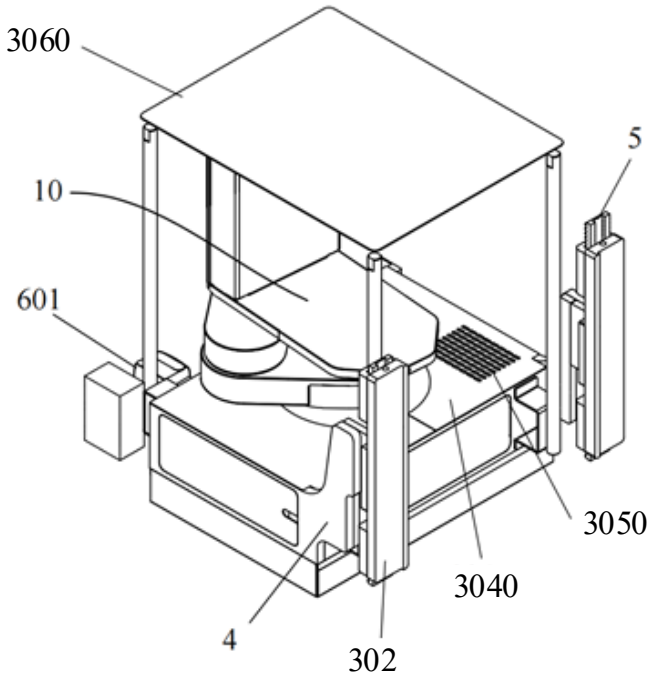

3060
5
10
601
3050
3040
4
302

FIG. 25

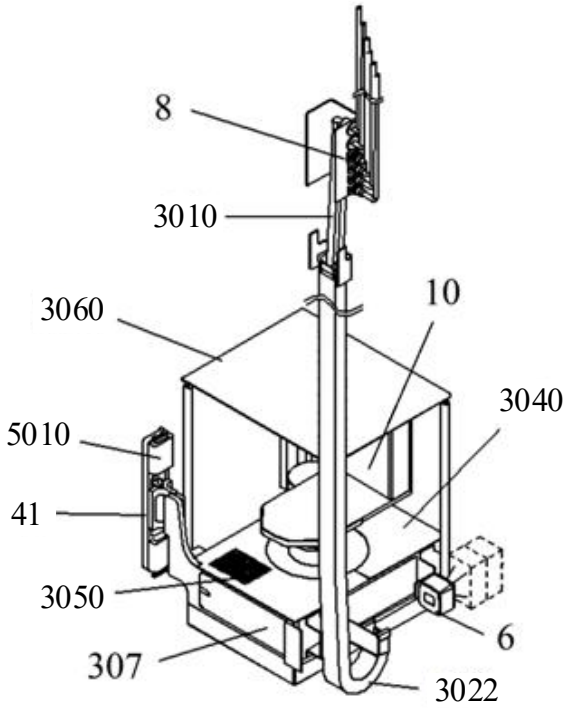

8
3010
10
3060
3040
5010
41
3050
6
307
3022

FIG. 26

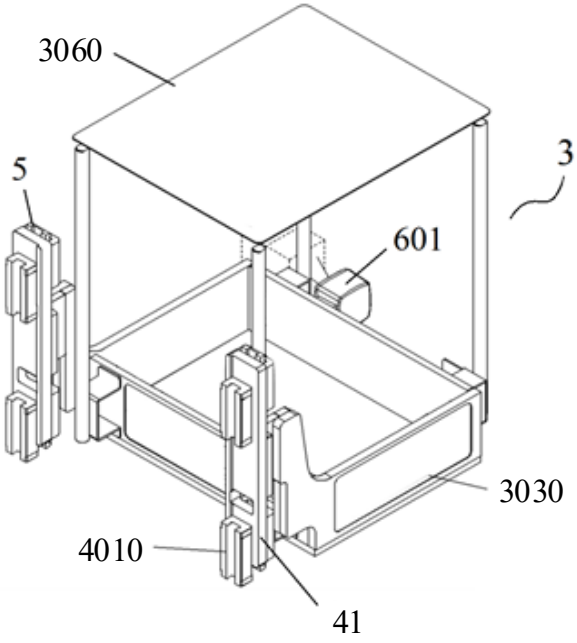


FIG. 27

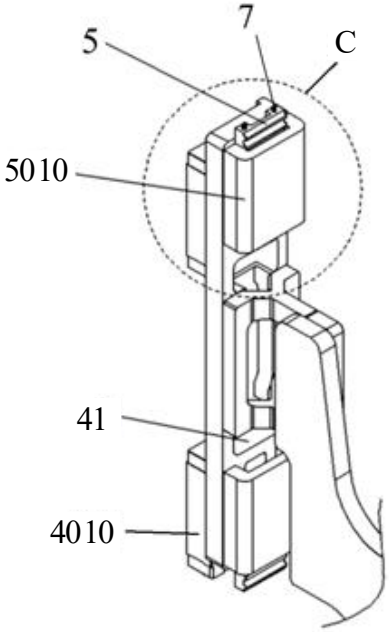


FIG. 28

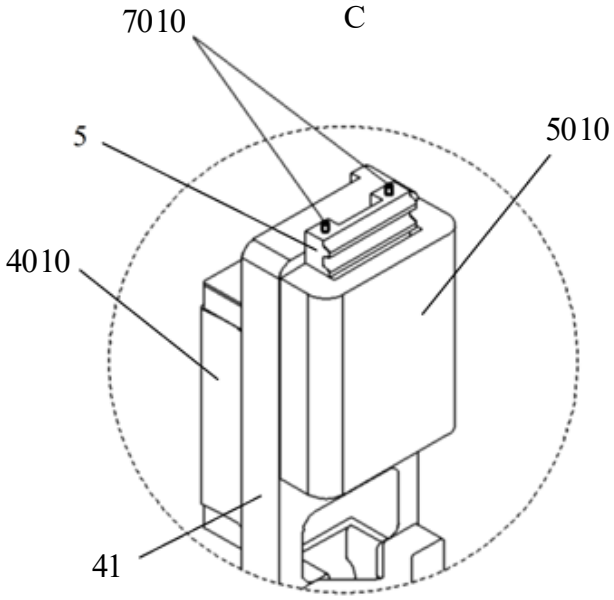


FIG. 29

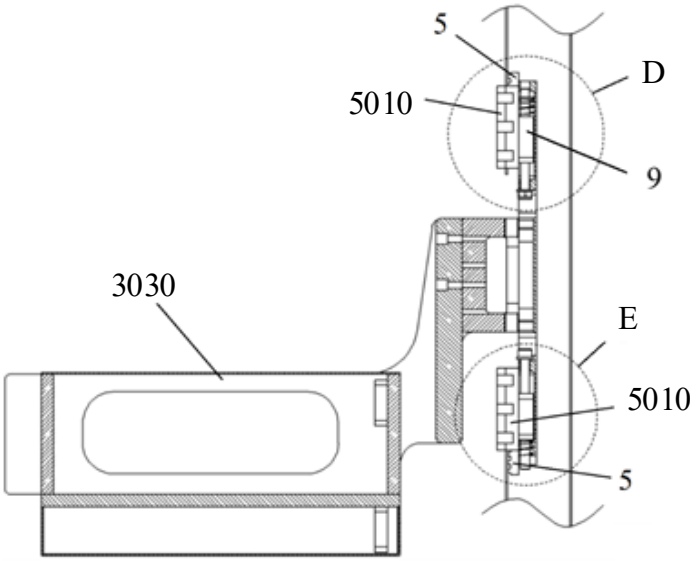


FIG. 30

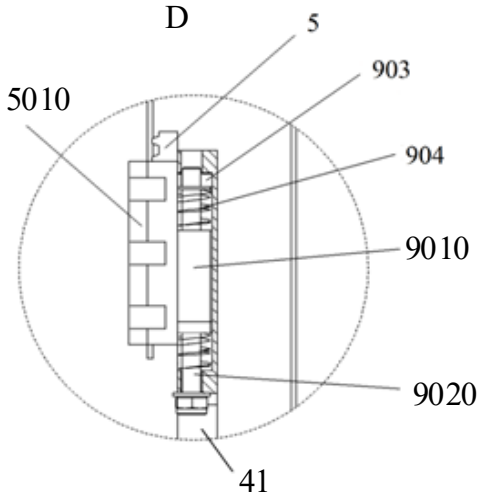


FIG. 31

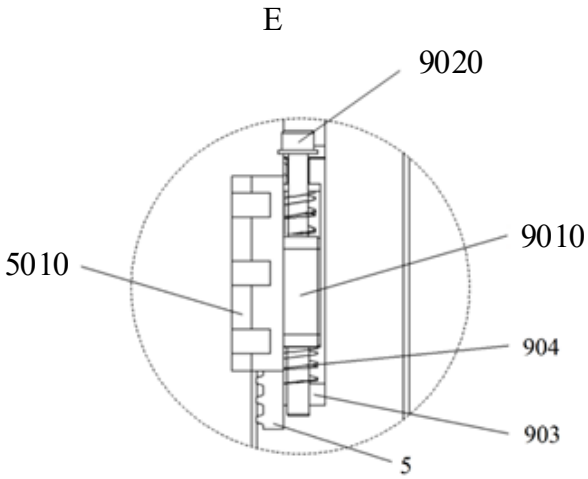


FIG. 32

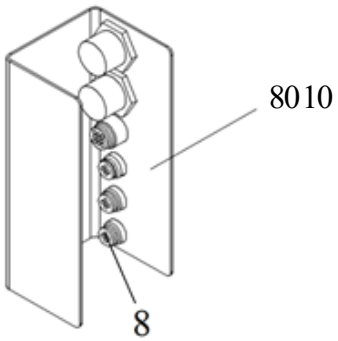


FIG. 33