FIG. 1

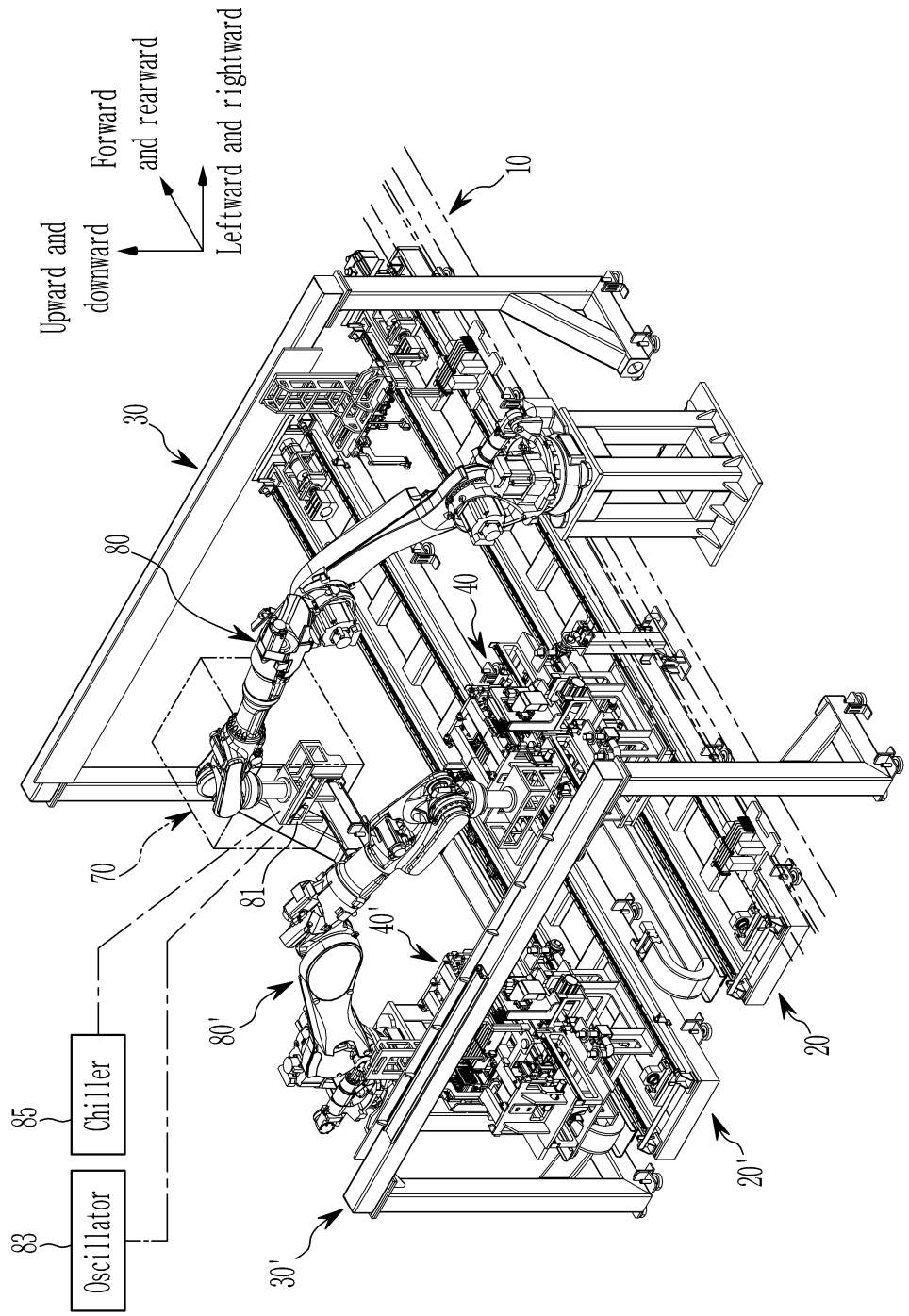
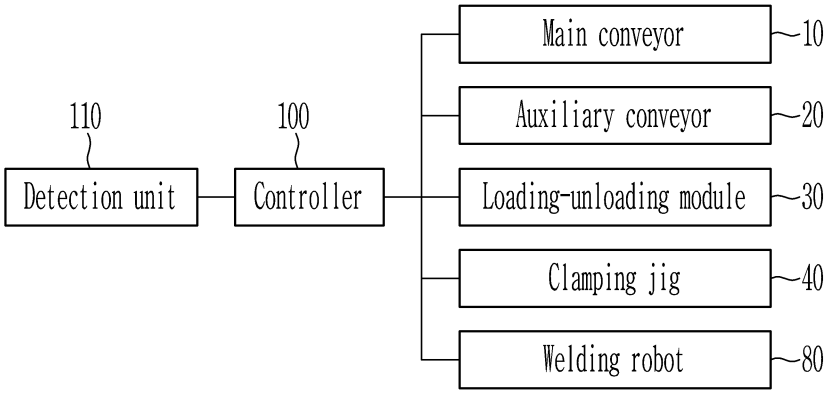

Upward and downward
Forward and rearward
Leftward and rightward
10
30
80
40
70
81
40'
80'
20
20'
30'
85
Chiller
83
Oscillator

FIG. 2


Main conveyor
10
Auxiliary conveyor
20
110
100
Detection unit
Controller
Loading-unloading module
30
Clamping jig
40
Welding robot
80

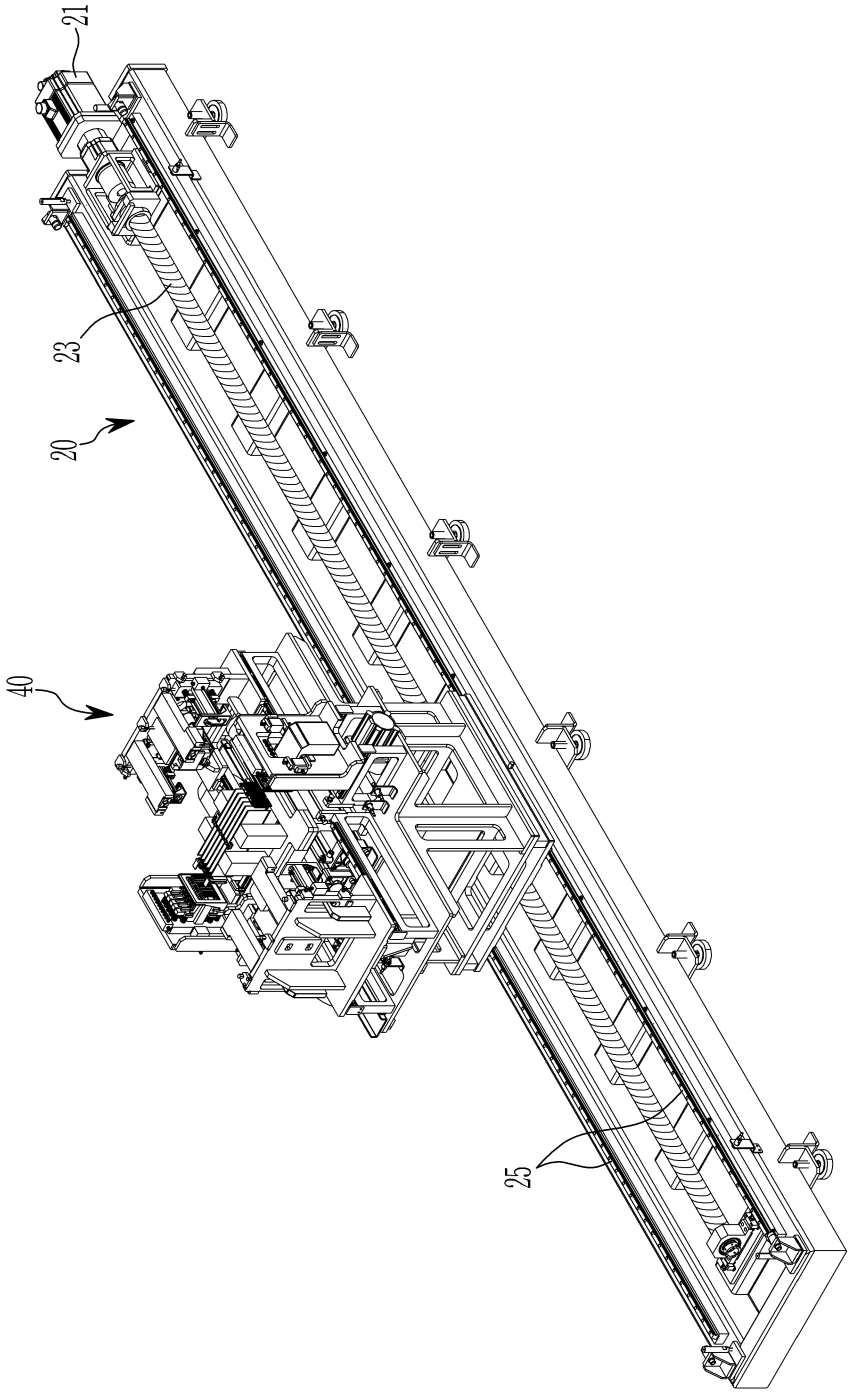


FIG. 3

FIG. 4

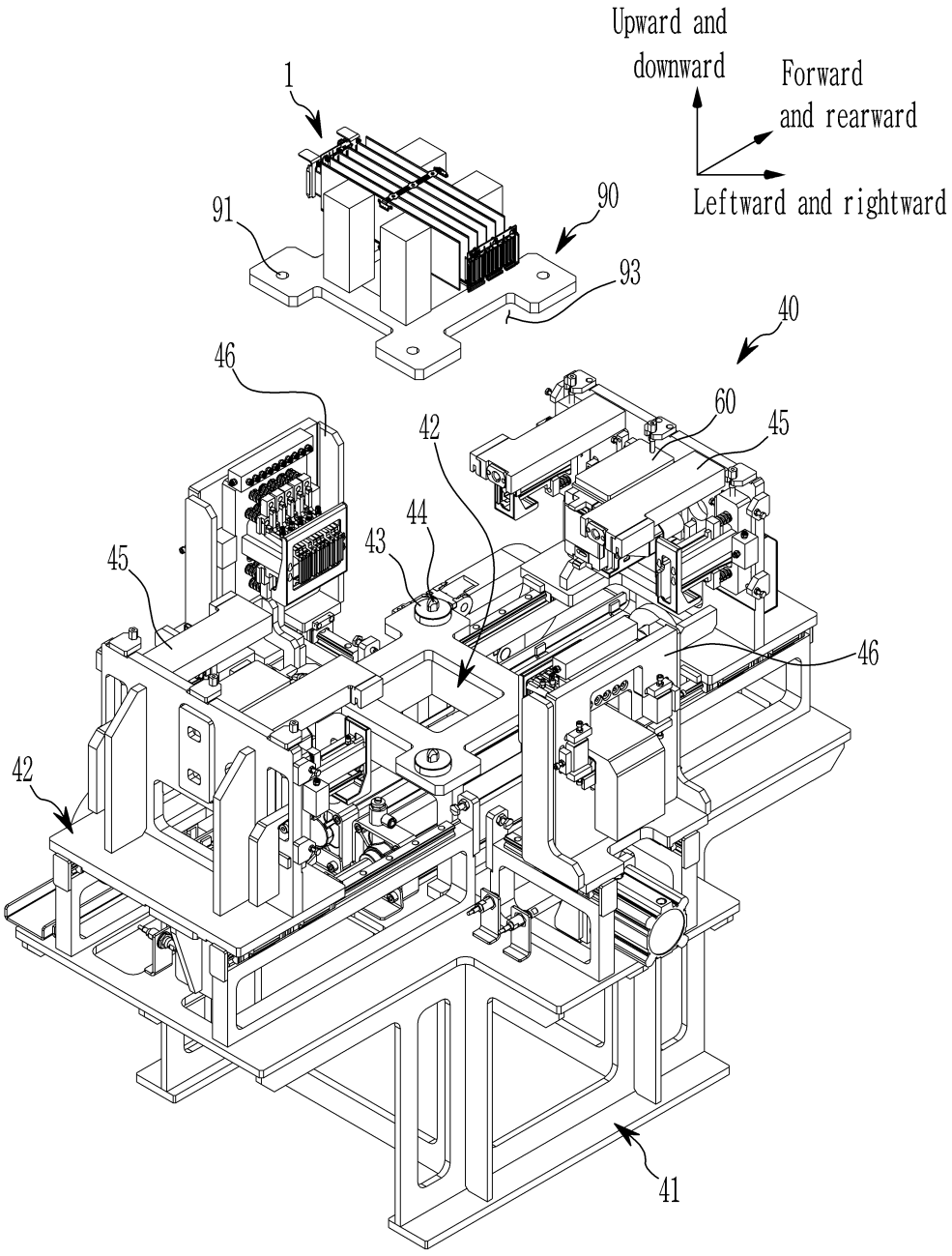

Upward and downward
Forward and rearward
Leftward and rightward
1
90
91
93
40
46
60
45
42
44
43
45
46
42
41

FIG. 5

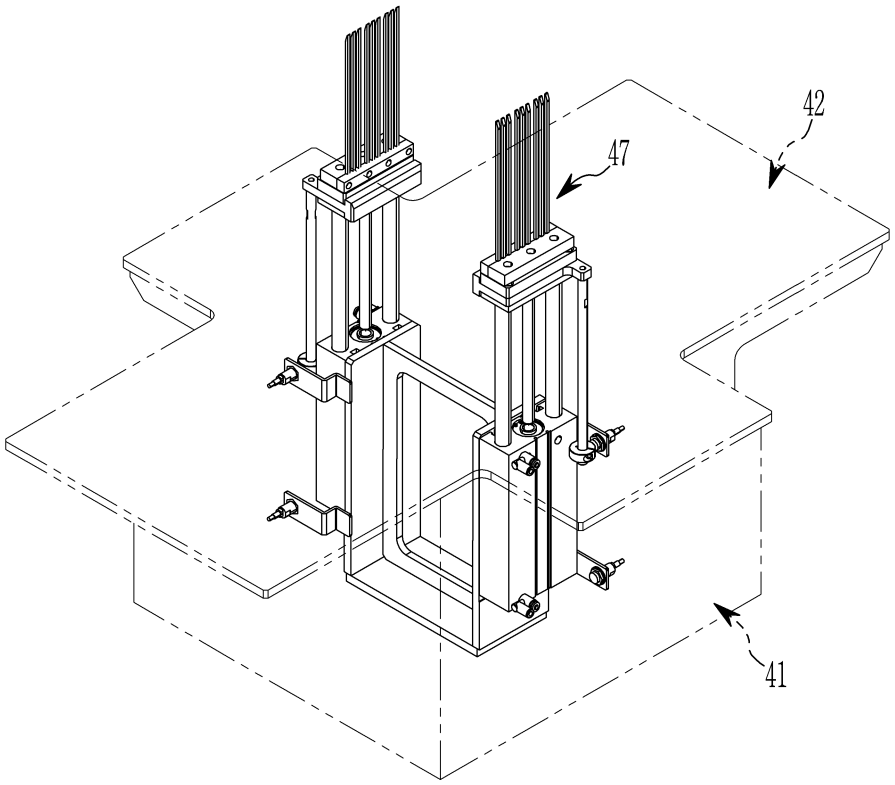


FIG. 6A

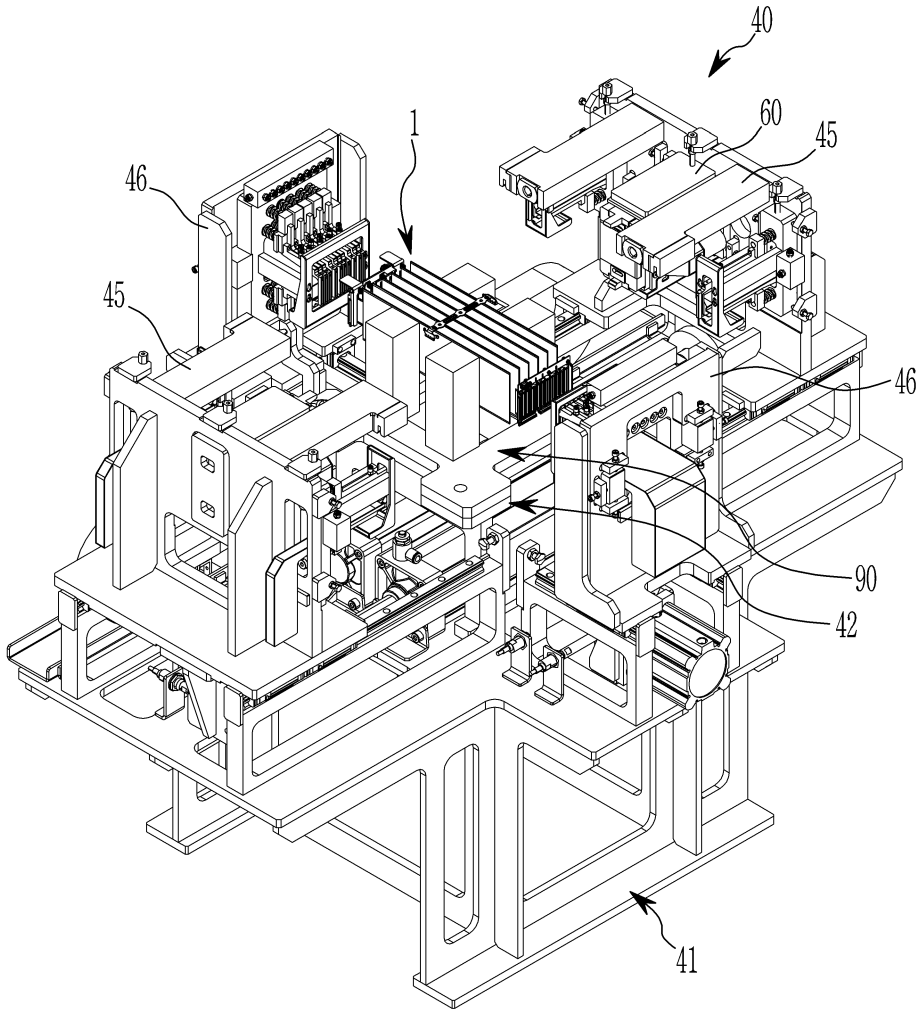


FIG. 6B

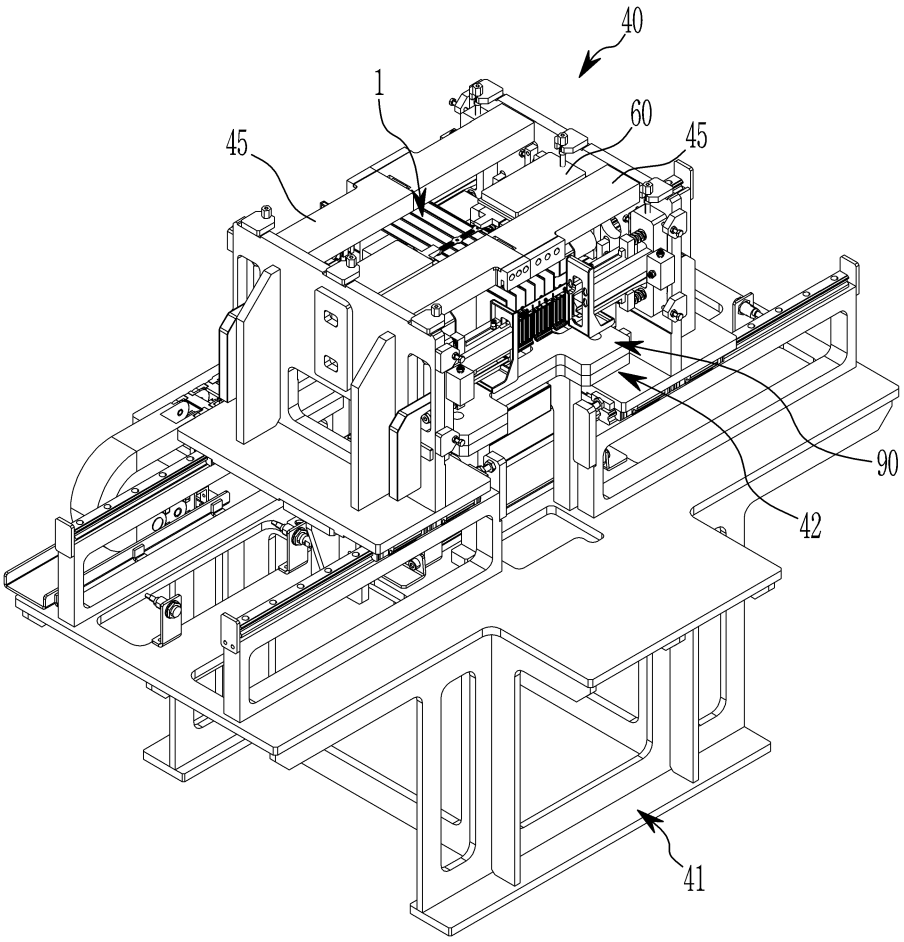


FIG. 6C

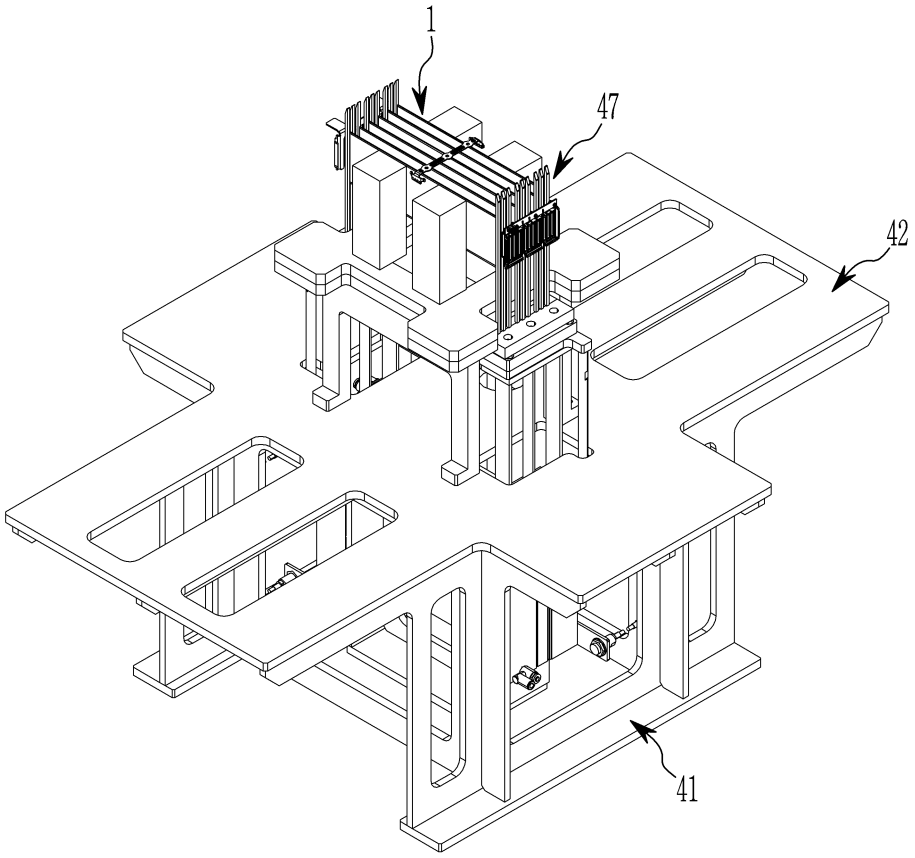


FIG. 6D

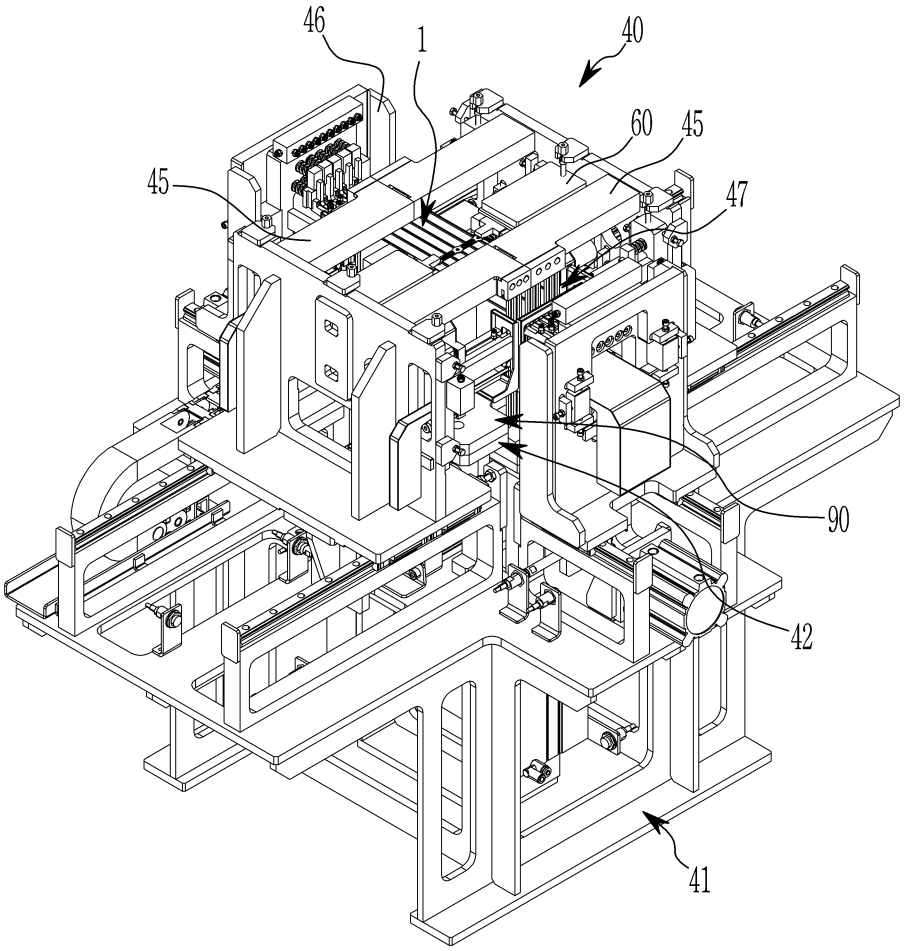
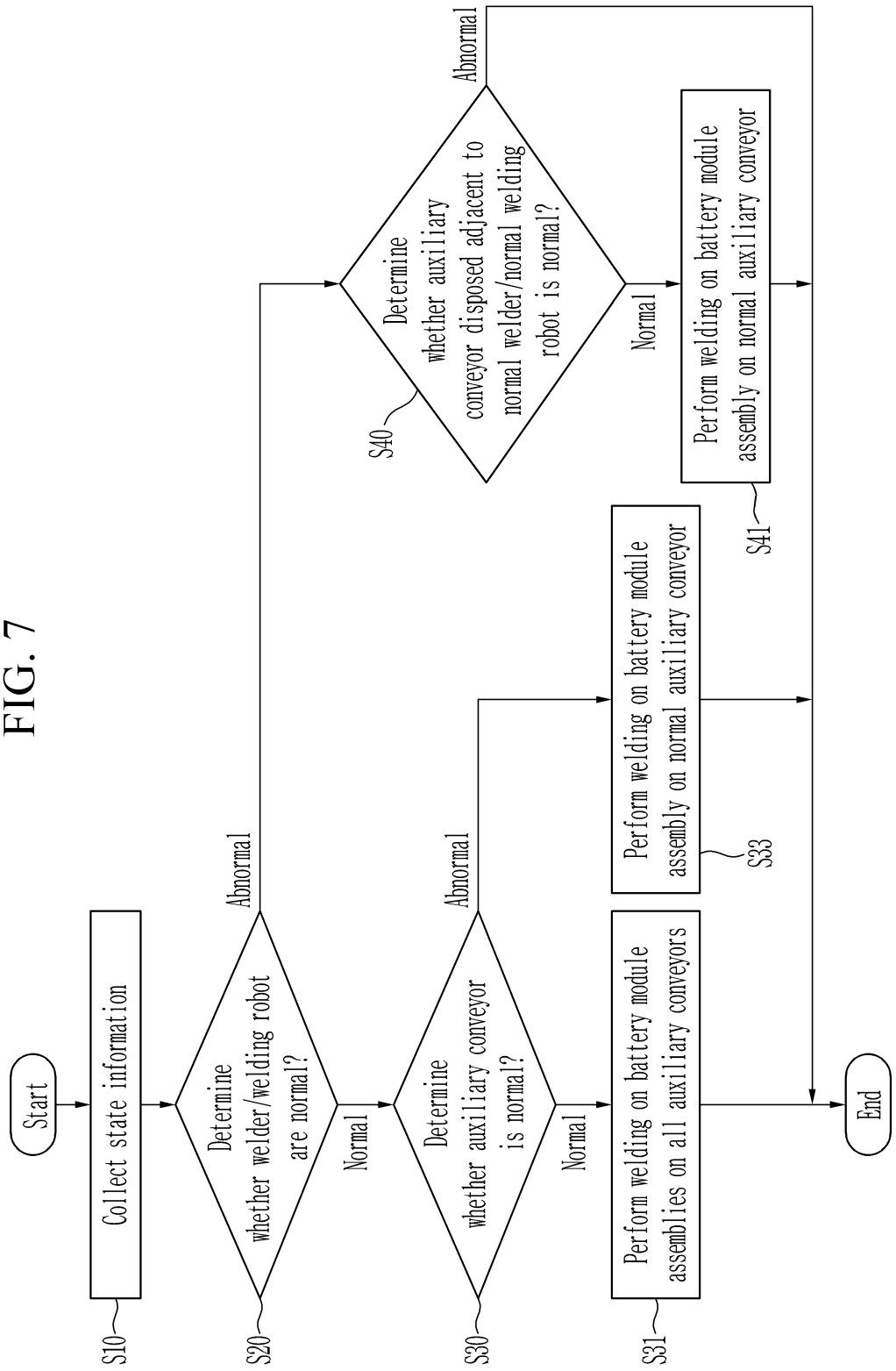


FIG. 7


Start
Collect state information
S10
Determine whether welder/welding robot are normal?
S20
Abnormal
Normal
Determine whether auxiliary conveyor is normal?
S30
Abnormal
Normal
Perform welding on battery module assemblies on all auxiliary conveyors
S31
Perform welding on battery module assembly on normal auxiliary conveyor
S33
Determine whether auxiliary conveyor disposed adjacent to normal welder/normal welding robot is normal?
S40
Abnormal
Normal
Perform welding on battery module assembly on normal auxiliary conveyor
S41
End