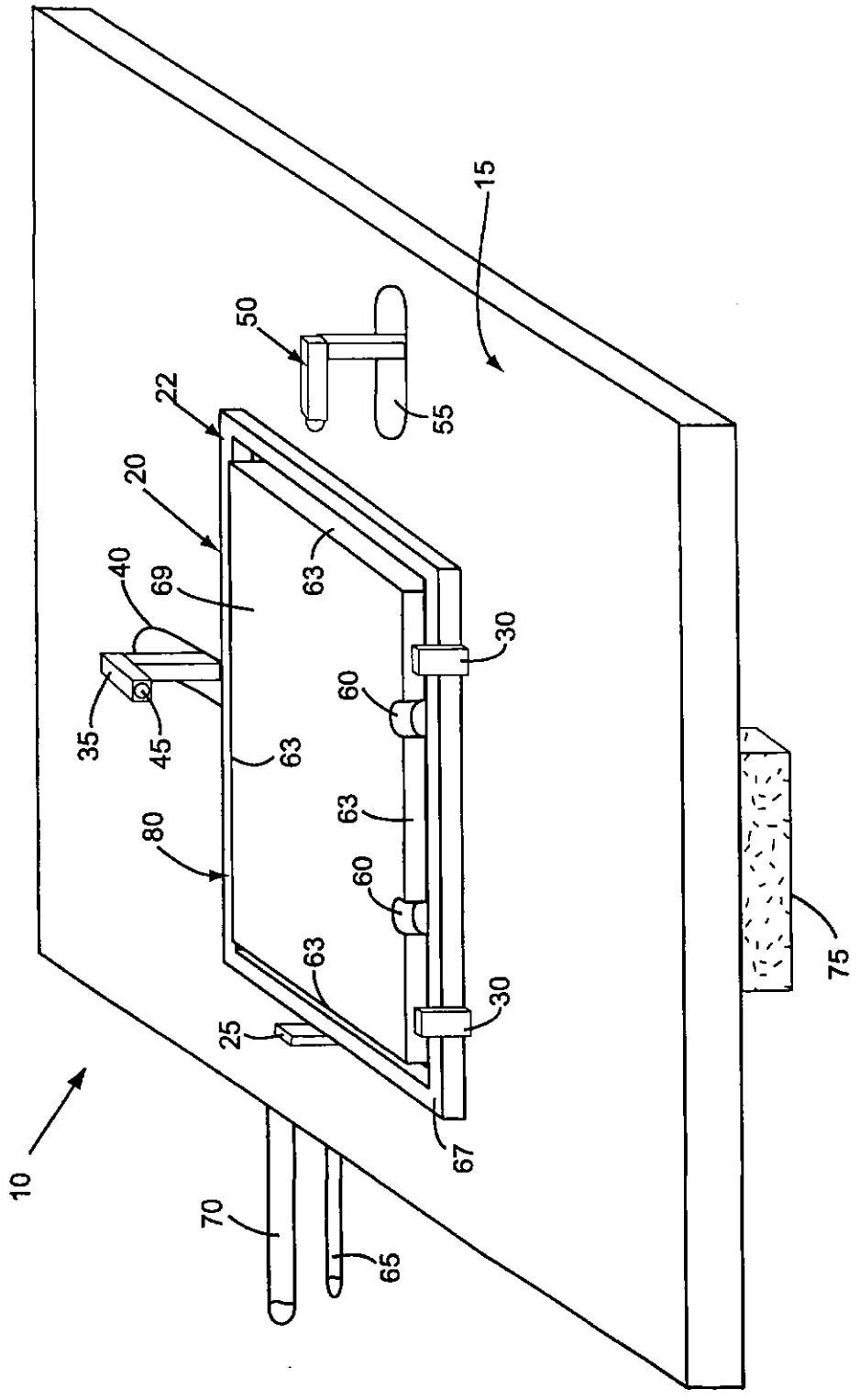


Fig. 1

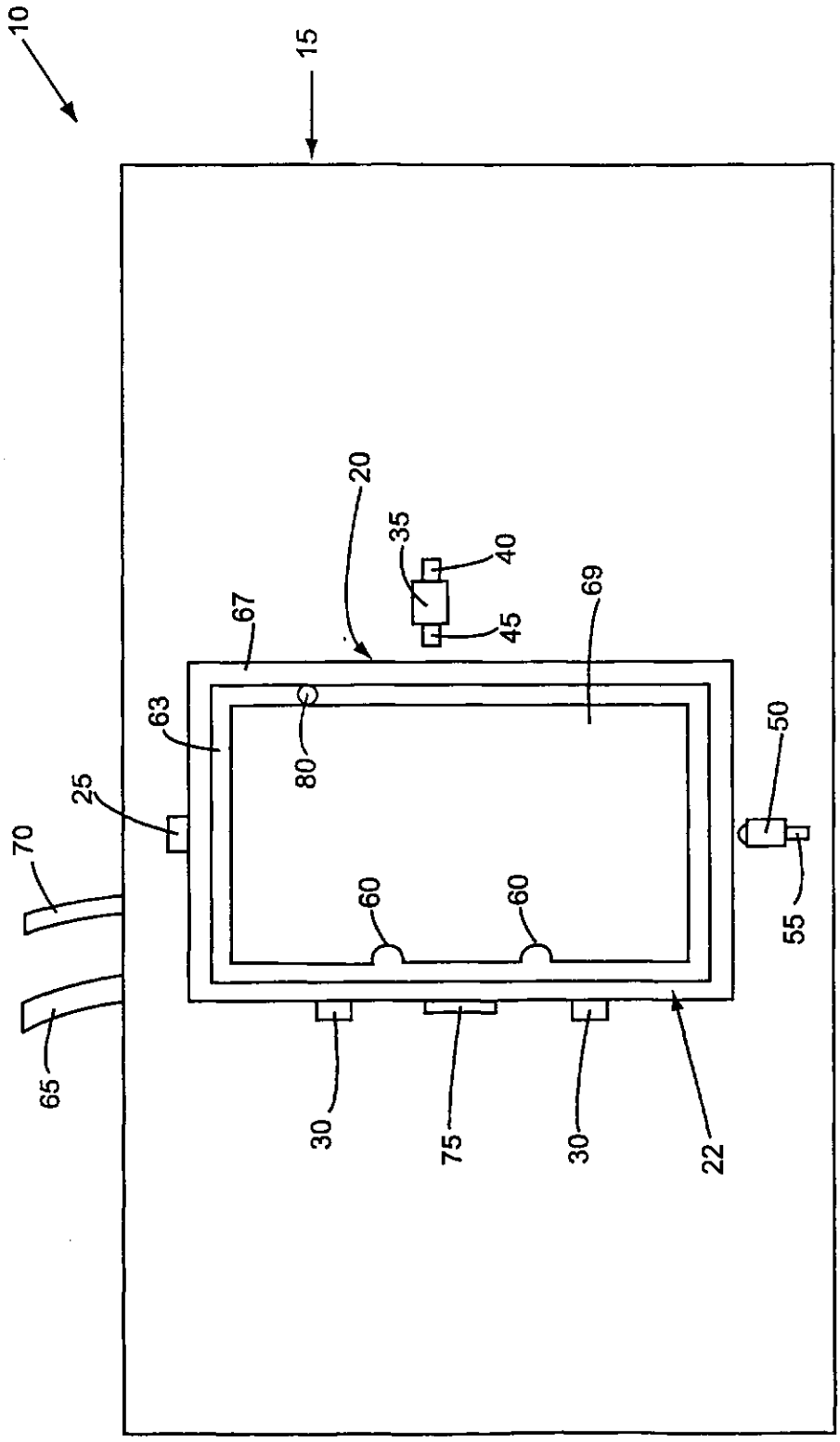


Fig. 2

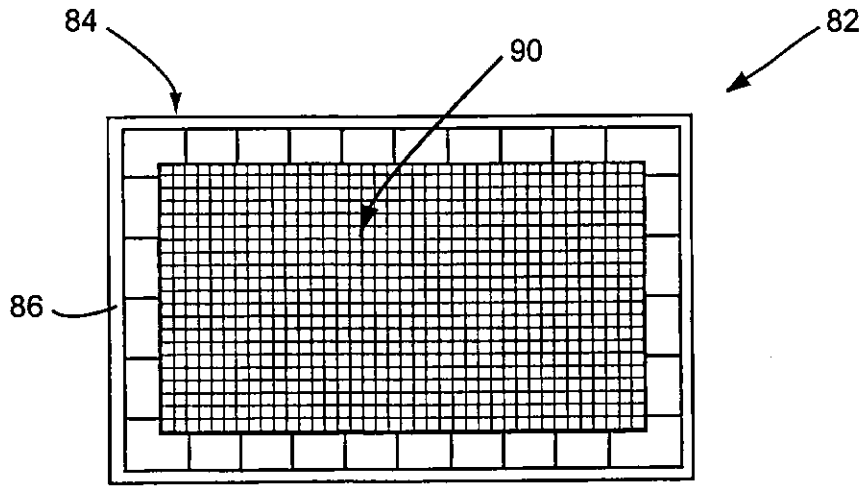


Fig. 3

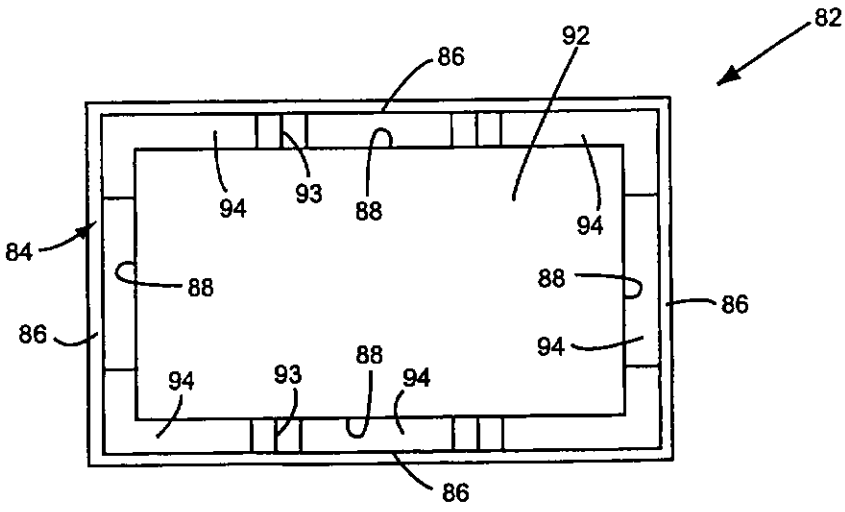


Fig. 4

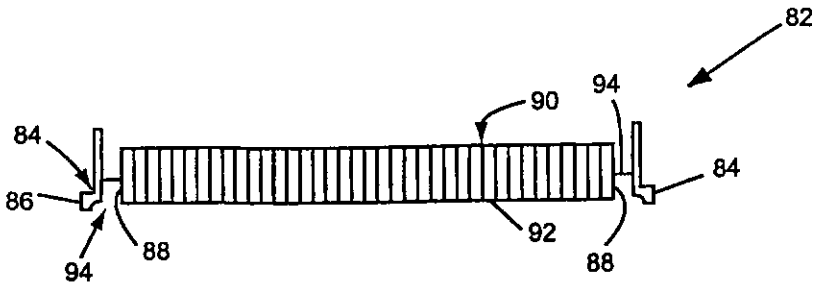


Fig. 5

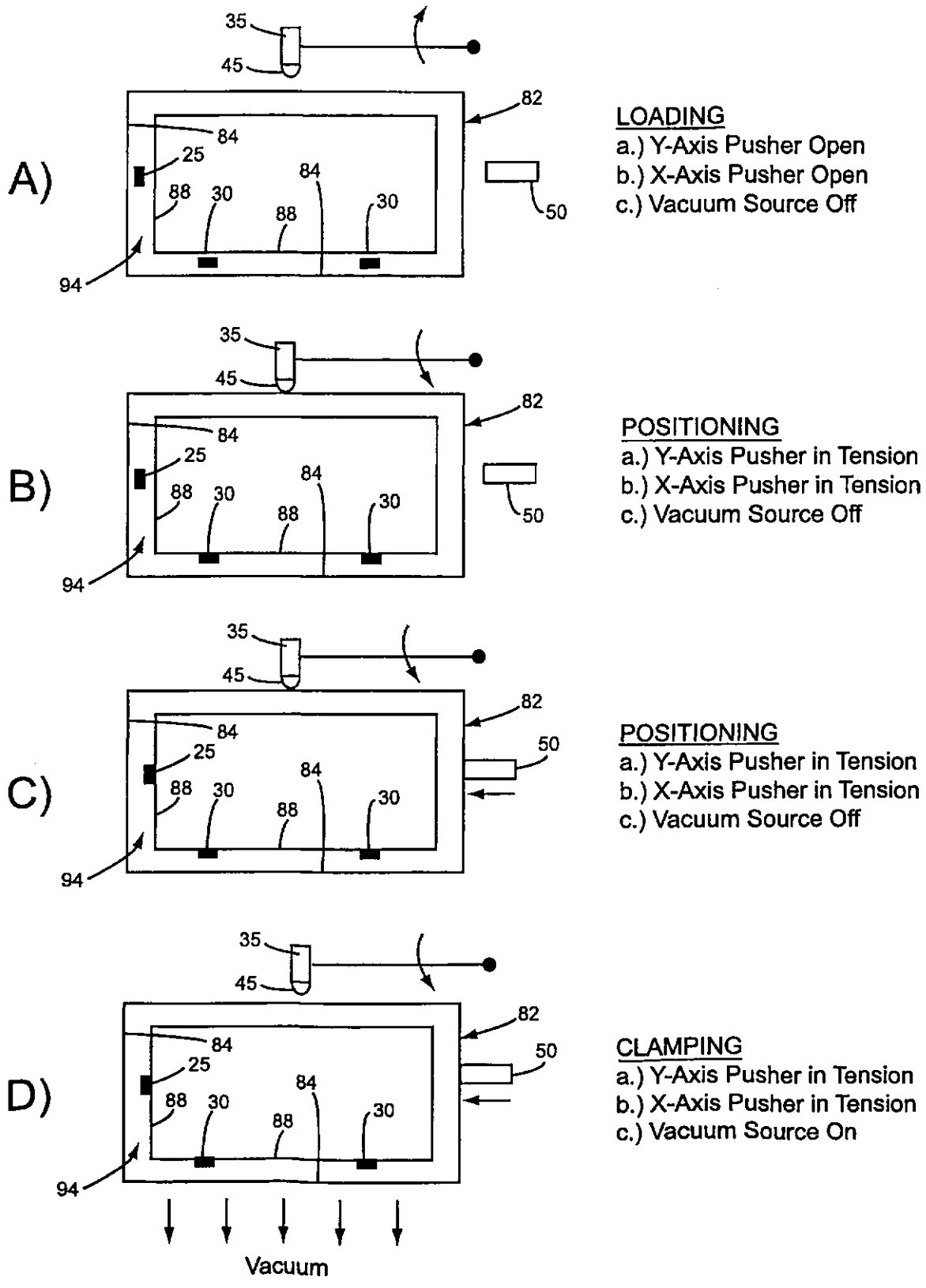

A)
35
45
82
84
25
88
30
84
88
30
50
94
LOADING
a.) Y-Axis Pusher Open
b.) X-Axis Pusher Open
c.) Vacuum Source Off
B)
POSITIONING
a.) Y-Axis Pusher in Tension
b.) X-Axis Pusher in Tension
c.) Vacuum Source Off
C)
POSITIONING
a.) Y-Axis Pusher in Tension
b.) X-Axis Pusher in Tension
c.) Vacuum Source Off
D)
CLAMPING
a.) Y-Axis Pusher in Tension
b.) X-Axis Pusher in Tension
c.) Vacuum Source On
Vacuum

Fig.6

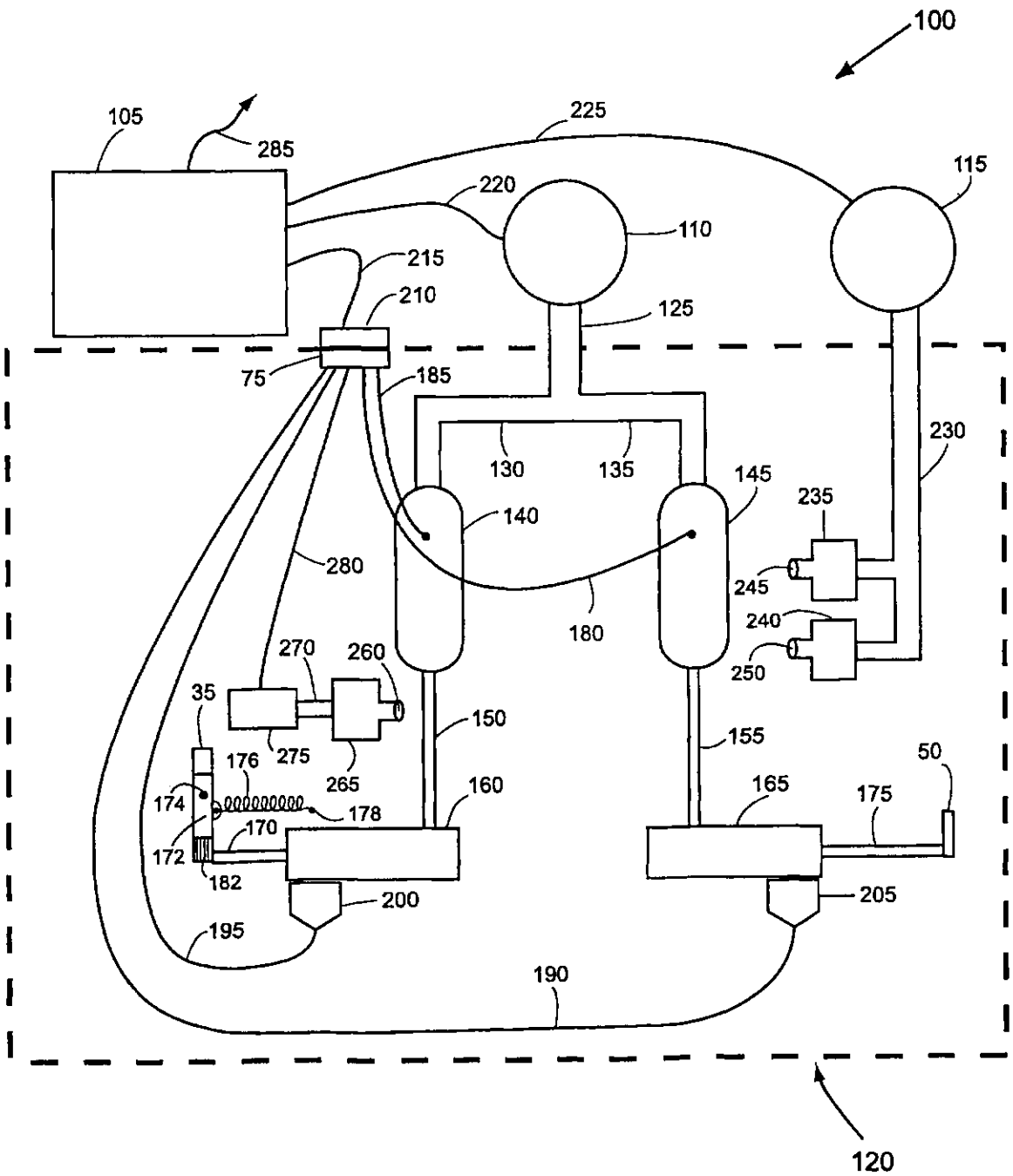

100
105
285
225
115
220
110
215
210
125
75
185
230
130
135
145
235
140
280
245
240
180
270
260
250
35
150
155
50
176
275
265
160
165
175
174
178
170
172
182
200
205
195
190
120

Fig. 7

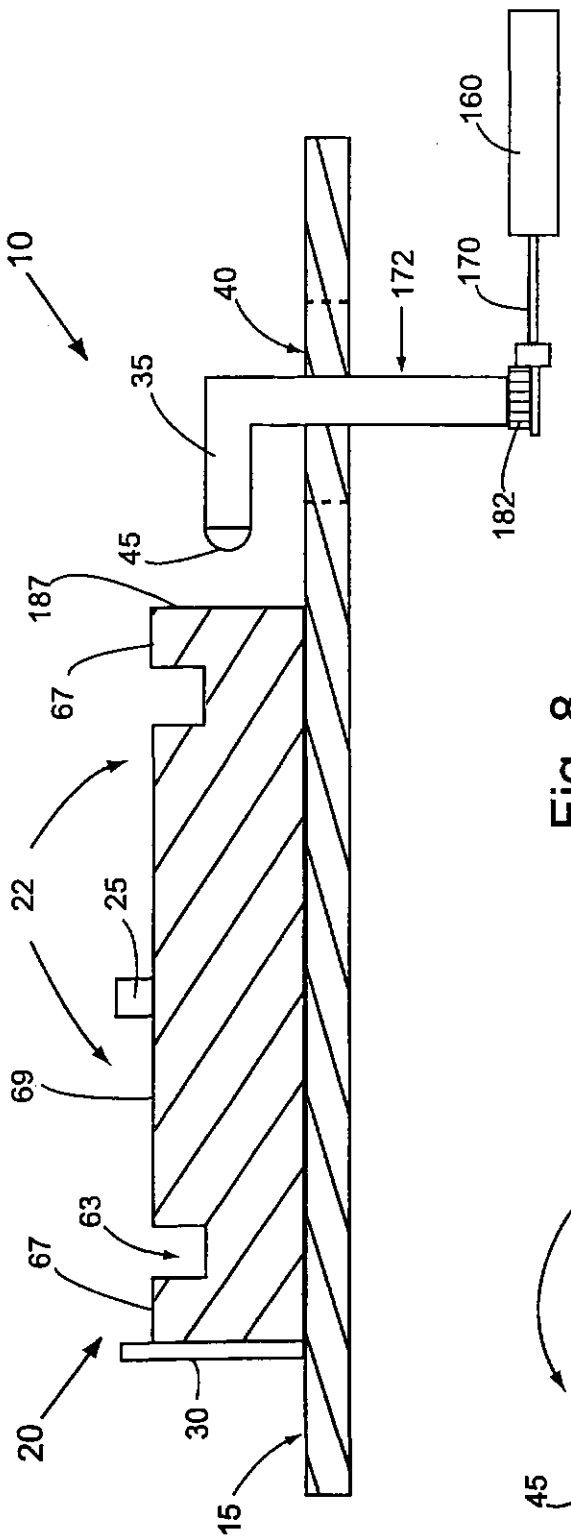


Fig. 8

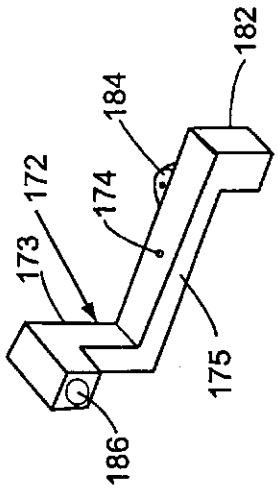


Fig. 10

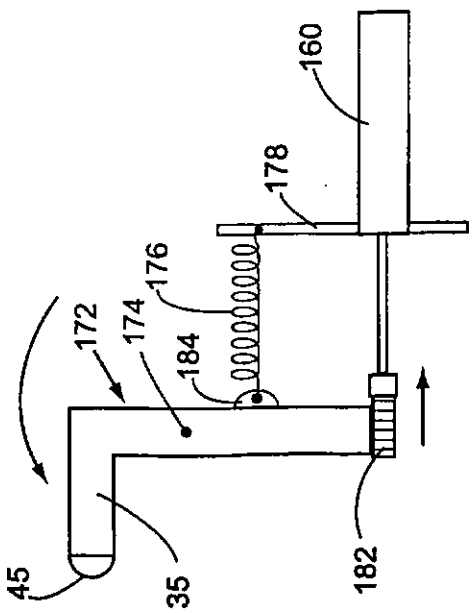


Fig. 9

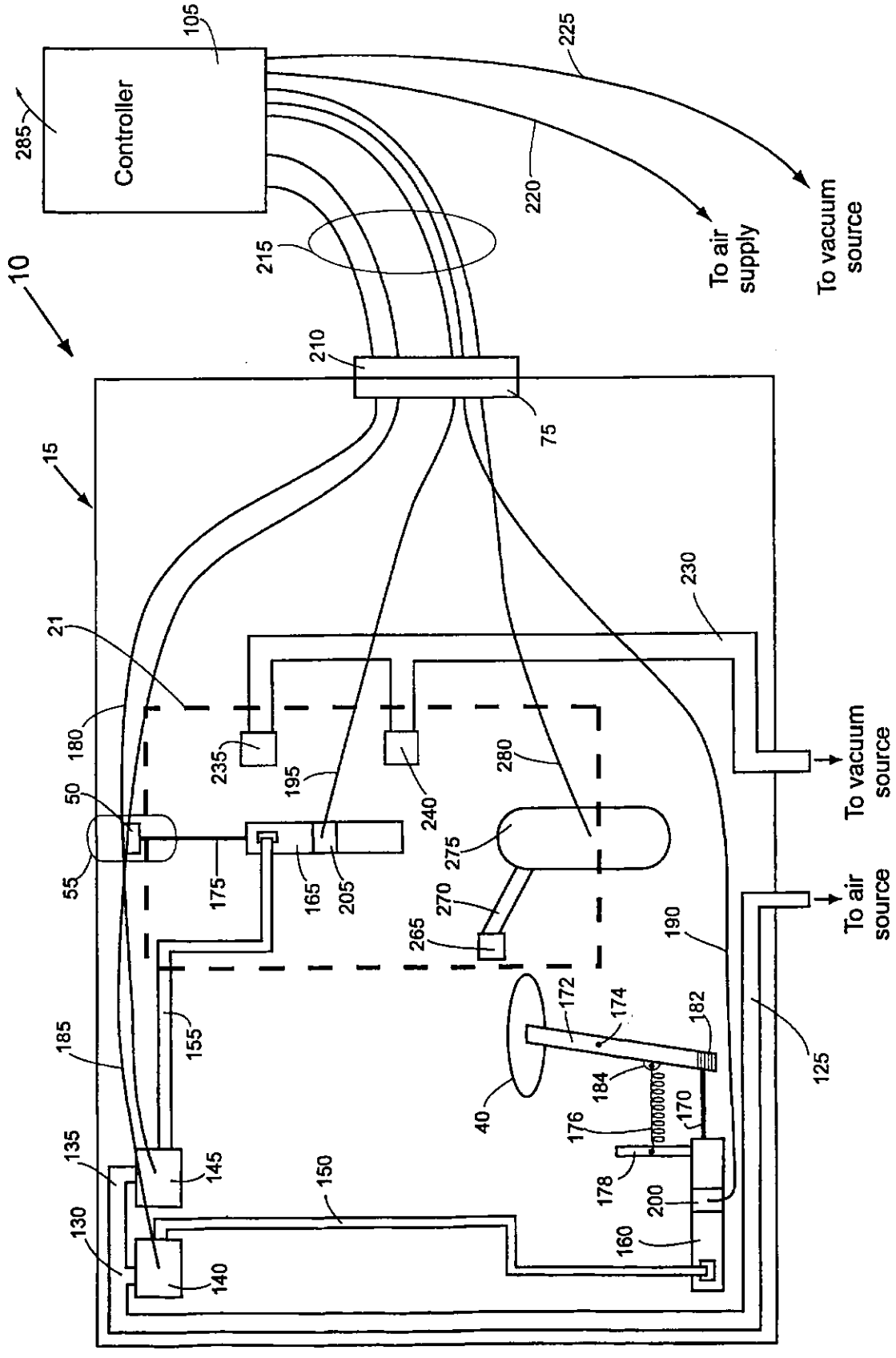

Controller
105
285
225
220
215
To air supply
To vacuum source
10
210
75
15
230
21
180
235
195
280
240
50
55
275
175
165
205
270
265
190
To vacuum source
To air source
172
174
182
185
155
184
125
40
170
176
135
145
150
178
200
130
160
140

Fig. 11

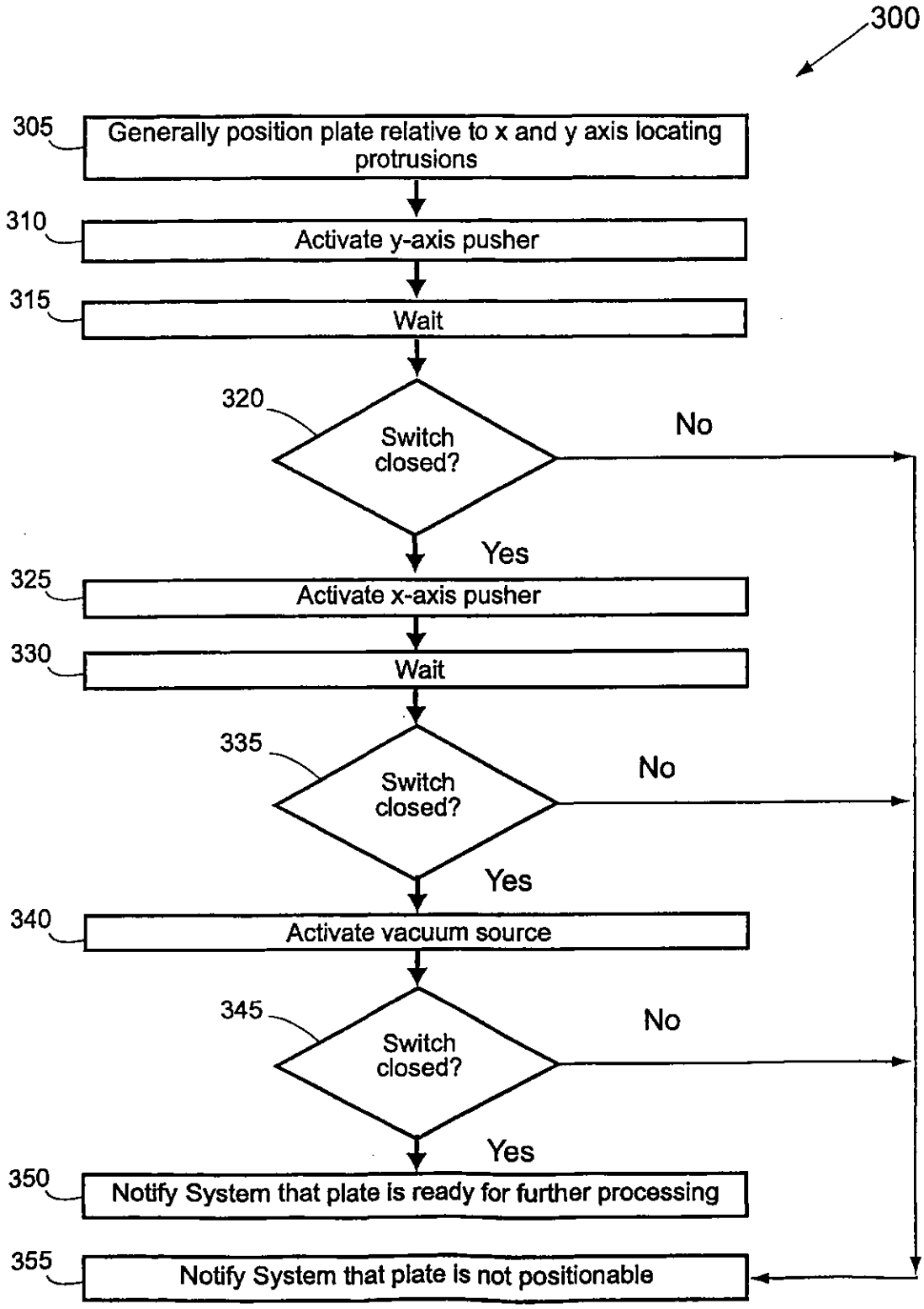

300
305
Generally position plate relative to x and y axis locating protrusions
310
Activate y-axis pusher
315
Wait
320
Switch closed?
No
Yes
325
Activate x-axis pusher
330
Wait
335
Switch closed?
No
Yes
340
Activate vacuum source
345
Switch closed?
No
Yes
350
Notify System that plate is ready for further processing
355
Notify System that plate is not positionable

Fig. 12

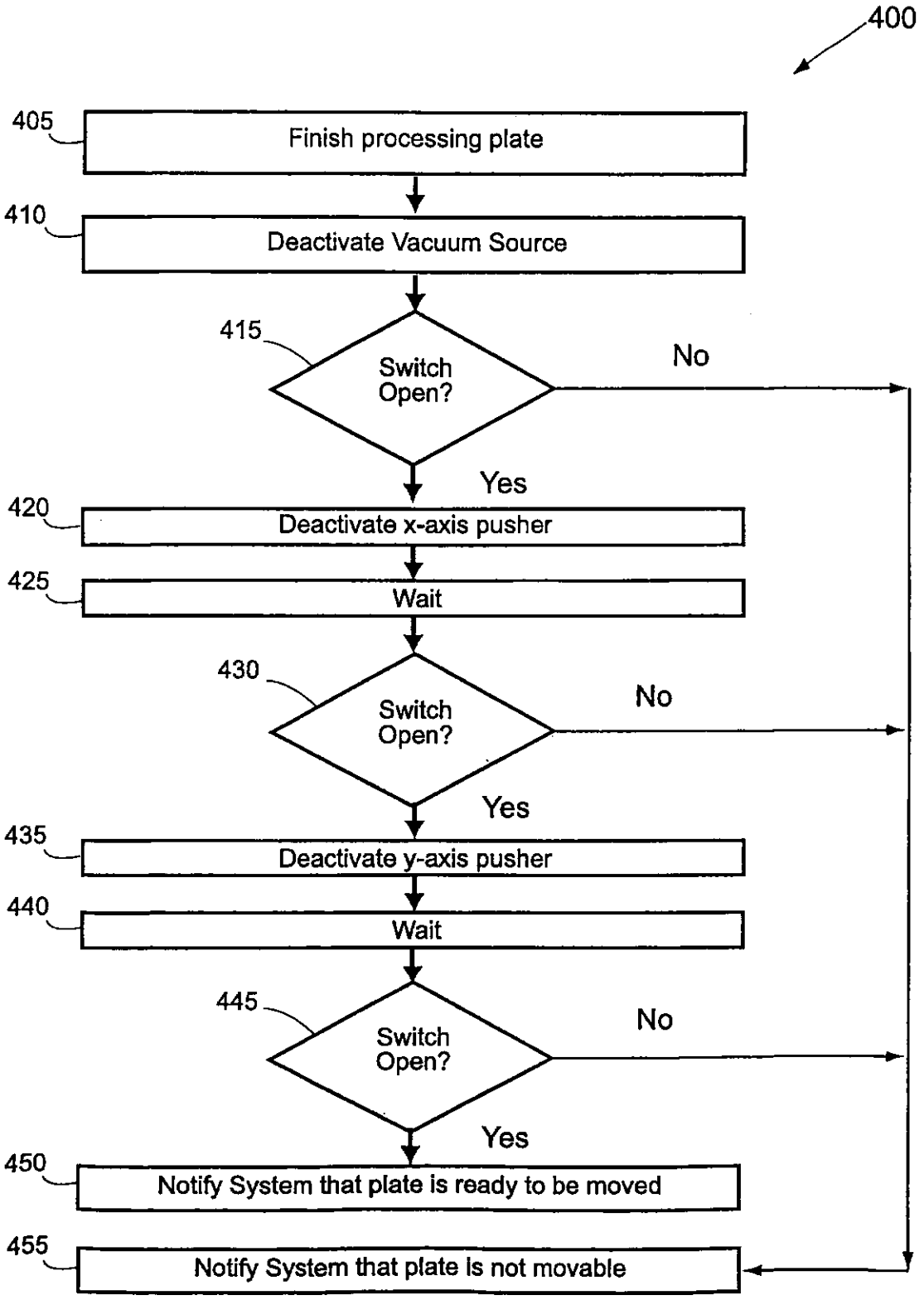

400
405
Finish processing plate
410
Deactivate Vacuum Source
415
Switch Open?
No
Yes
420
Deactivate x-axis pusher
425
Wait
430
Switch Open?
No
Yes
435
Deactivate y-axis pusher
440
Wait
445
Switch Open?
No
Yes
450
Notify System that plate is ready to be moved
455
Notify System that plate is not movable

Fig. 13