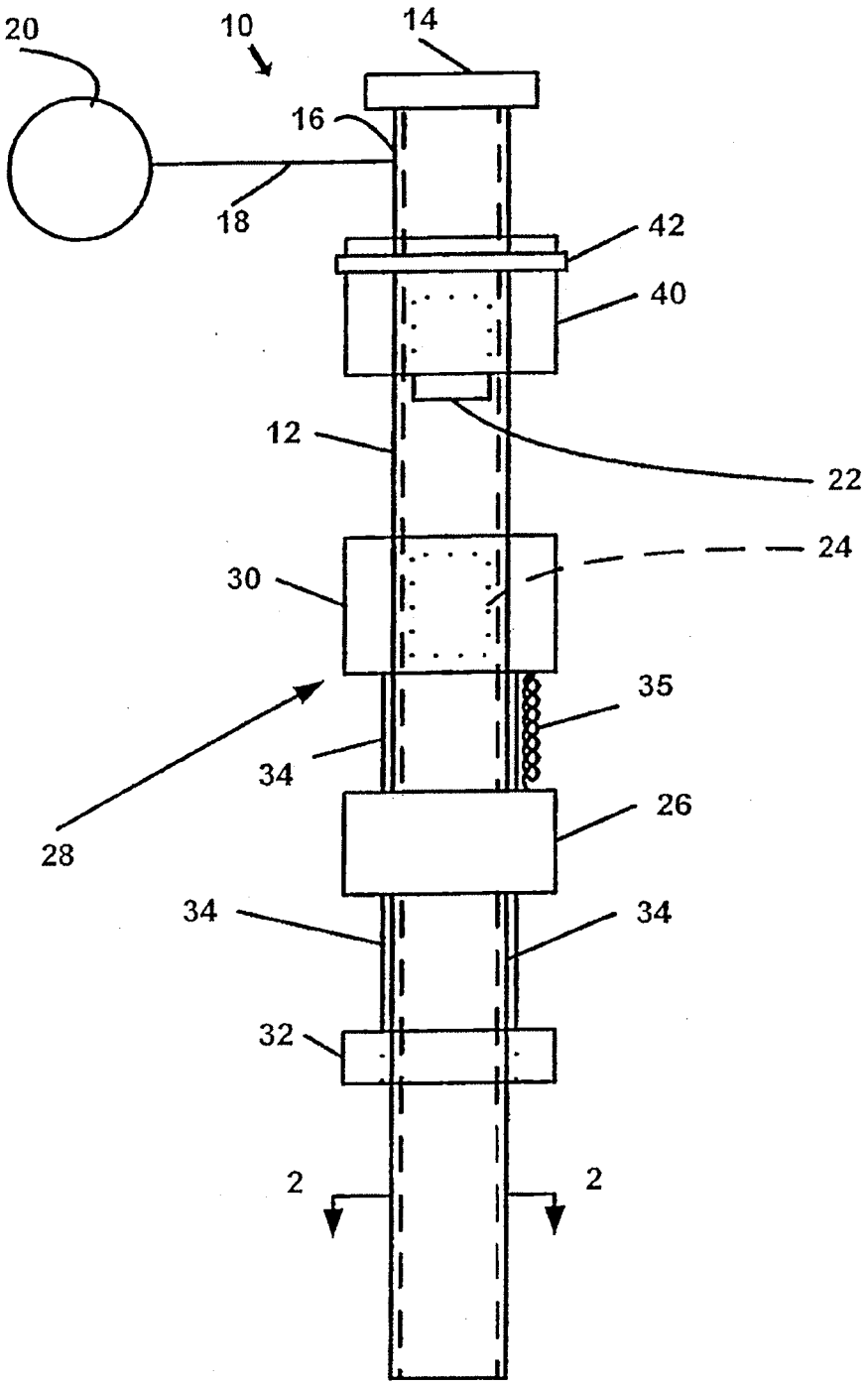


Fig. 1

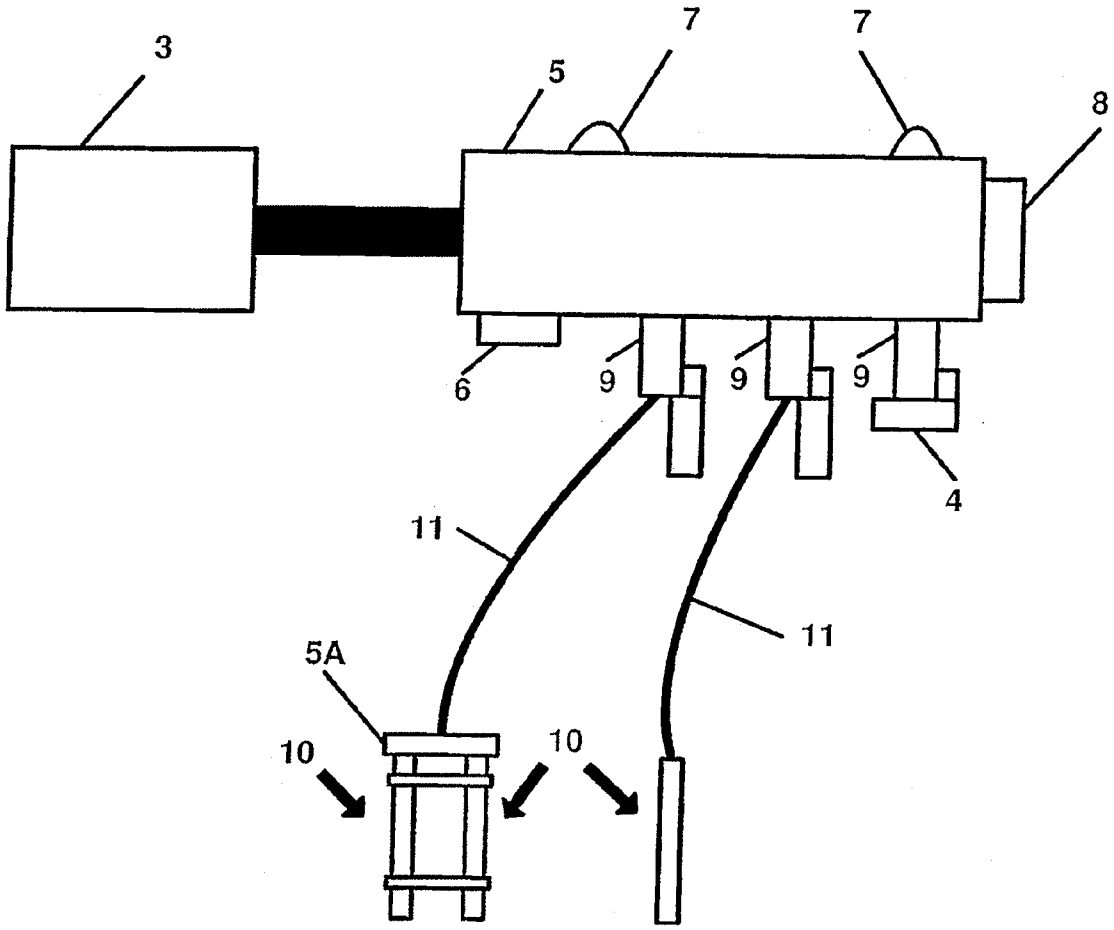


Fig. 1A

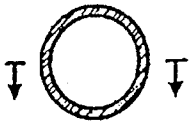


Fig. 2

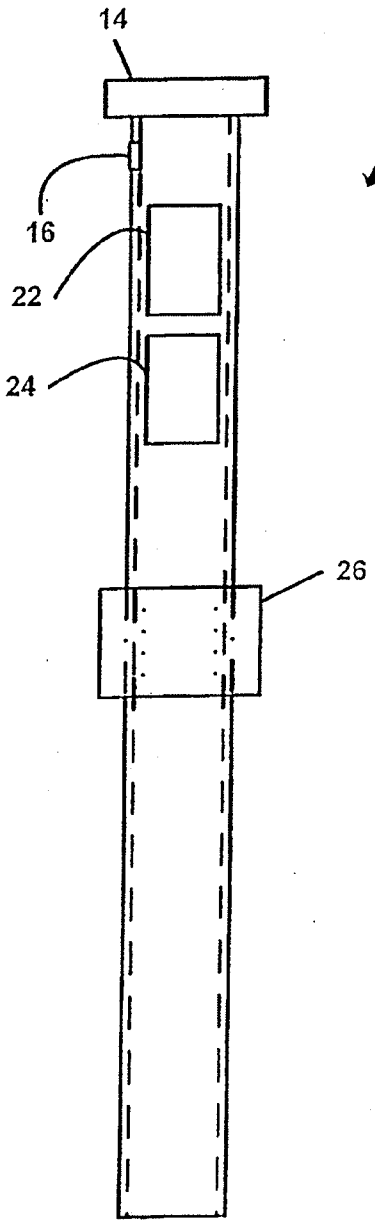


Fig. 3

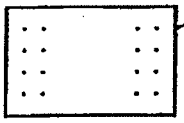


Fig. 4

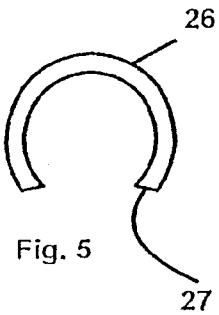


Fig. 5

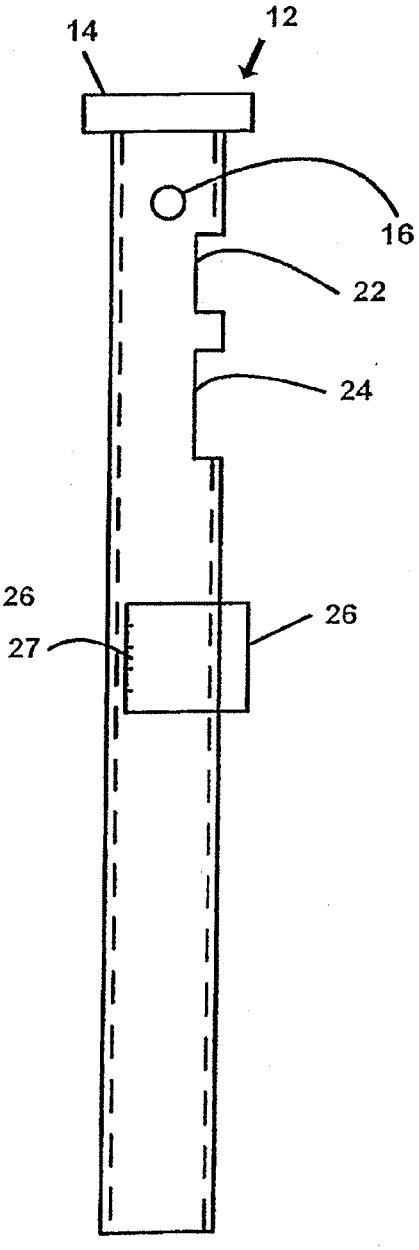


Fig. 6

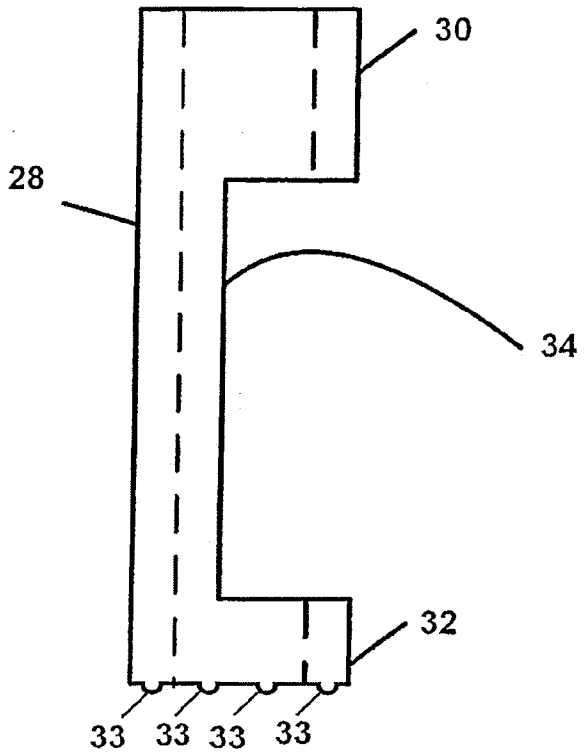


Fig. 7

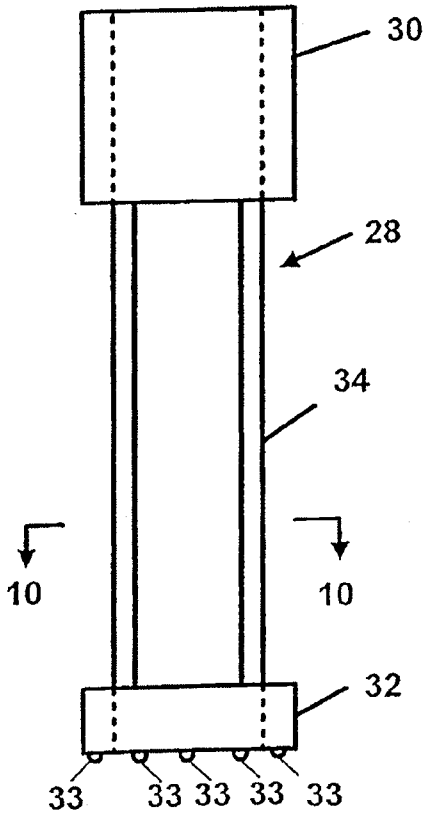


Fig. 8

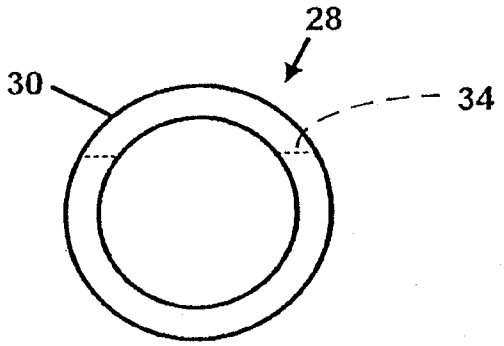


Fig. 9

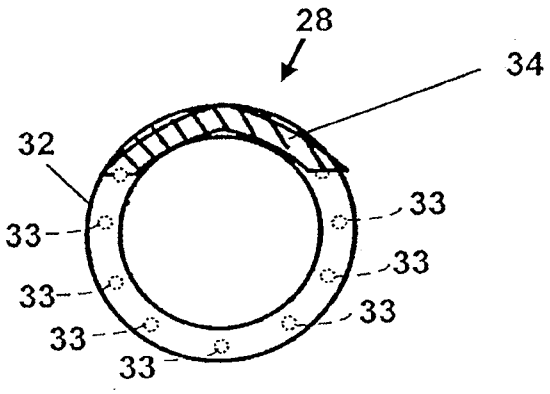


Fig. 10

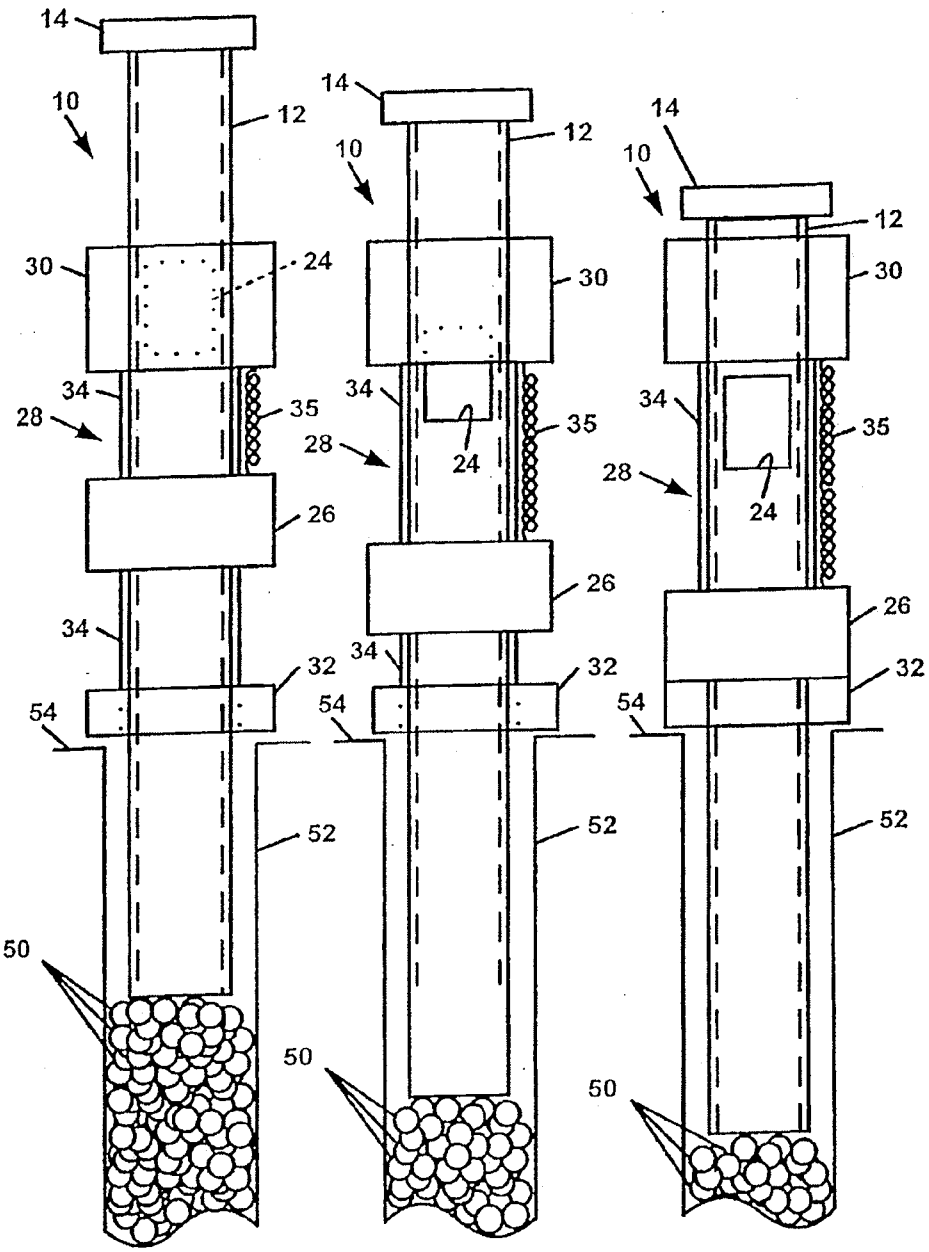


Fig. 11

Fig. 12

Fig. 13

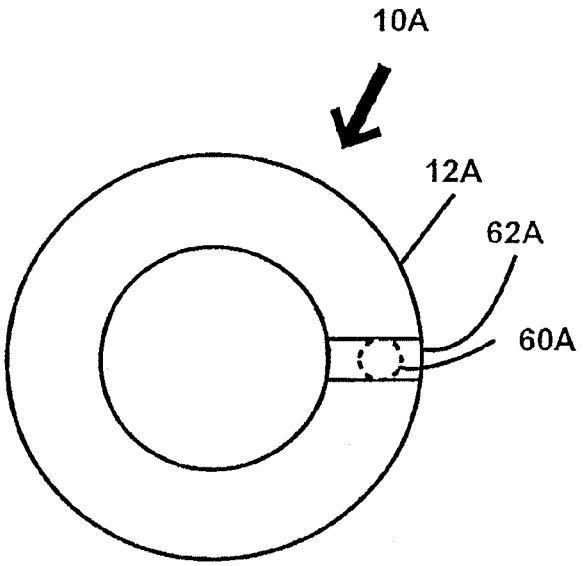


Fig. 14

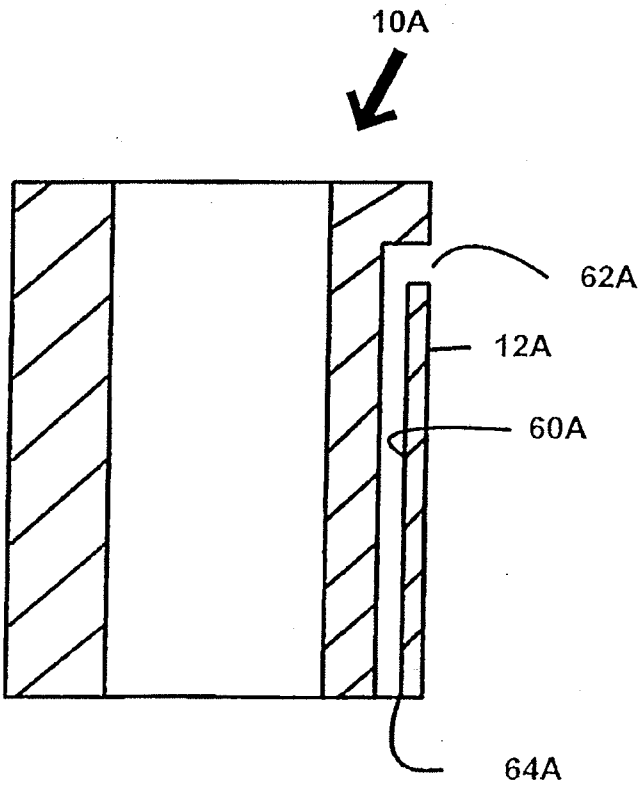


Fig. 15

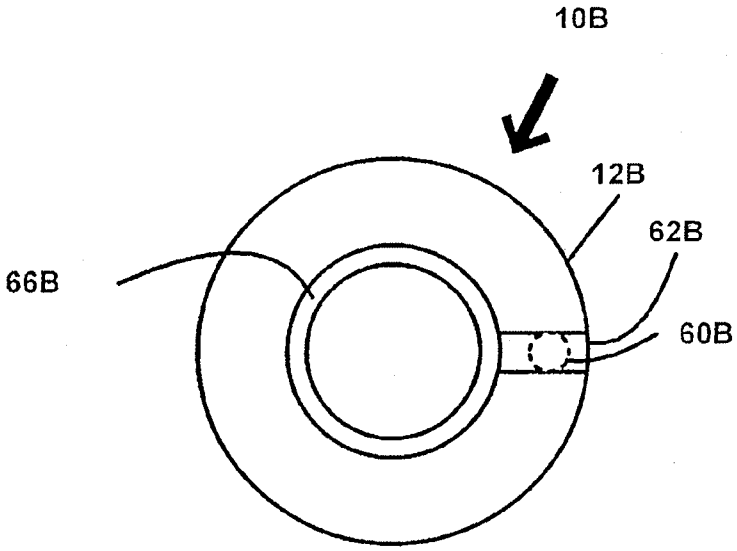


Fig. 16

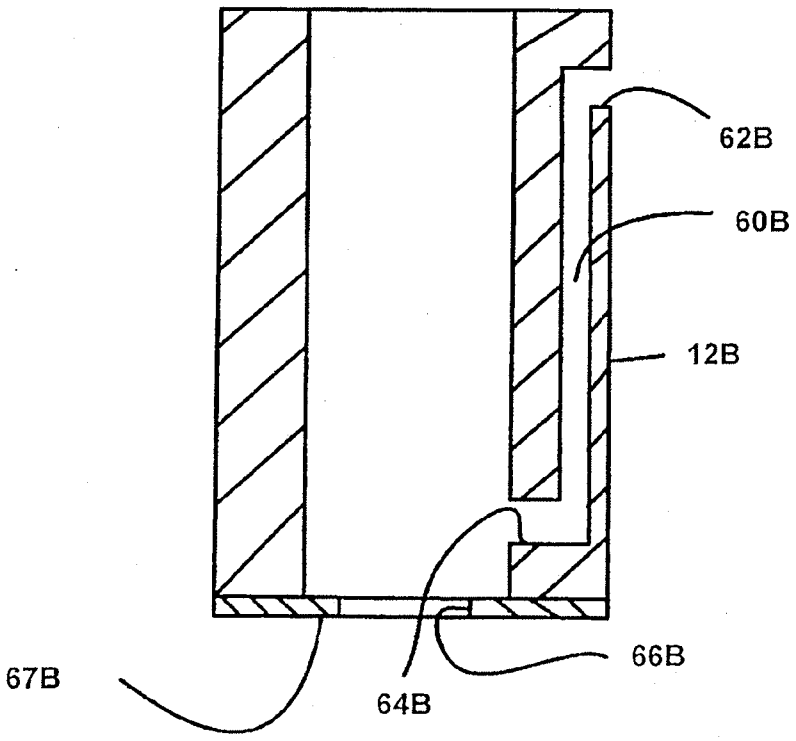


Fig. 17

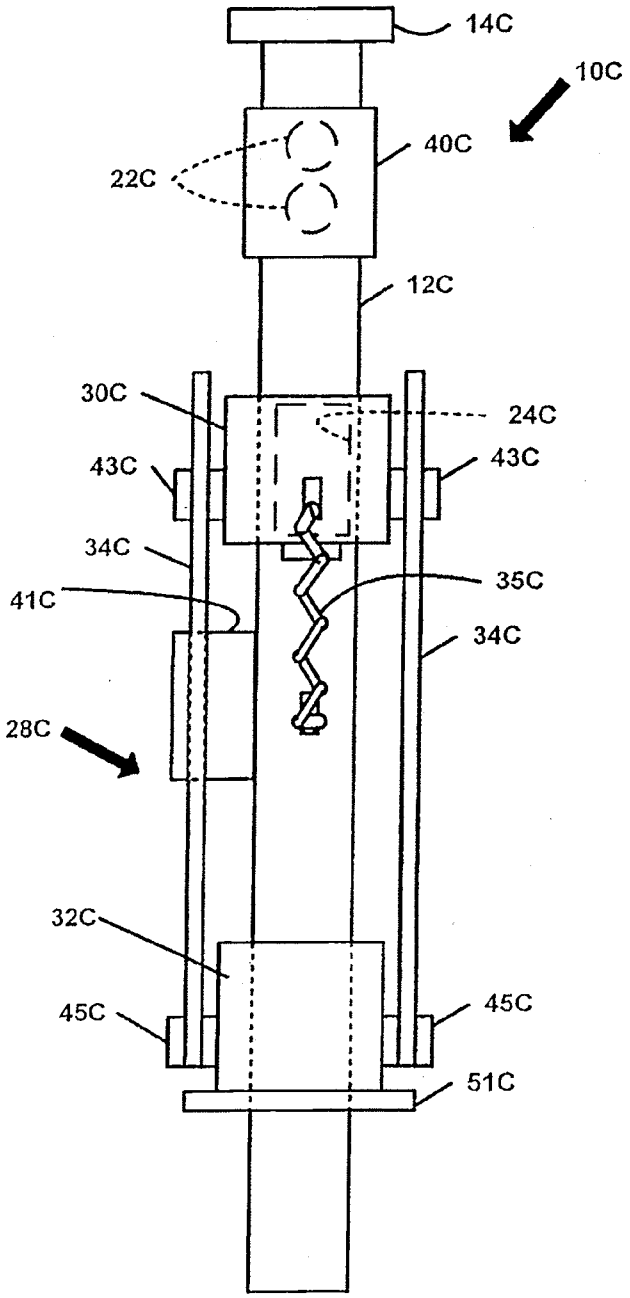

14C
10C
40C
22C
12C
30C
24C
43C
43C
34C
35C
41C
34C
28C
32C
45C
45C
51C

Fig. 18

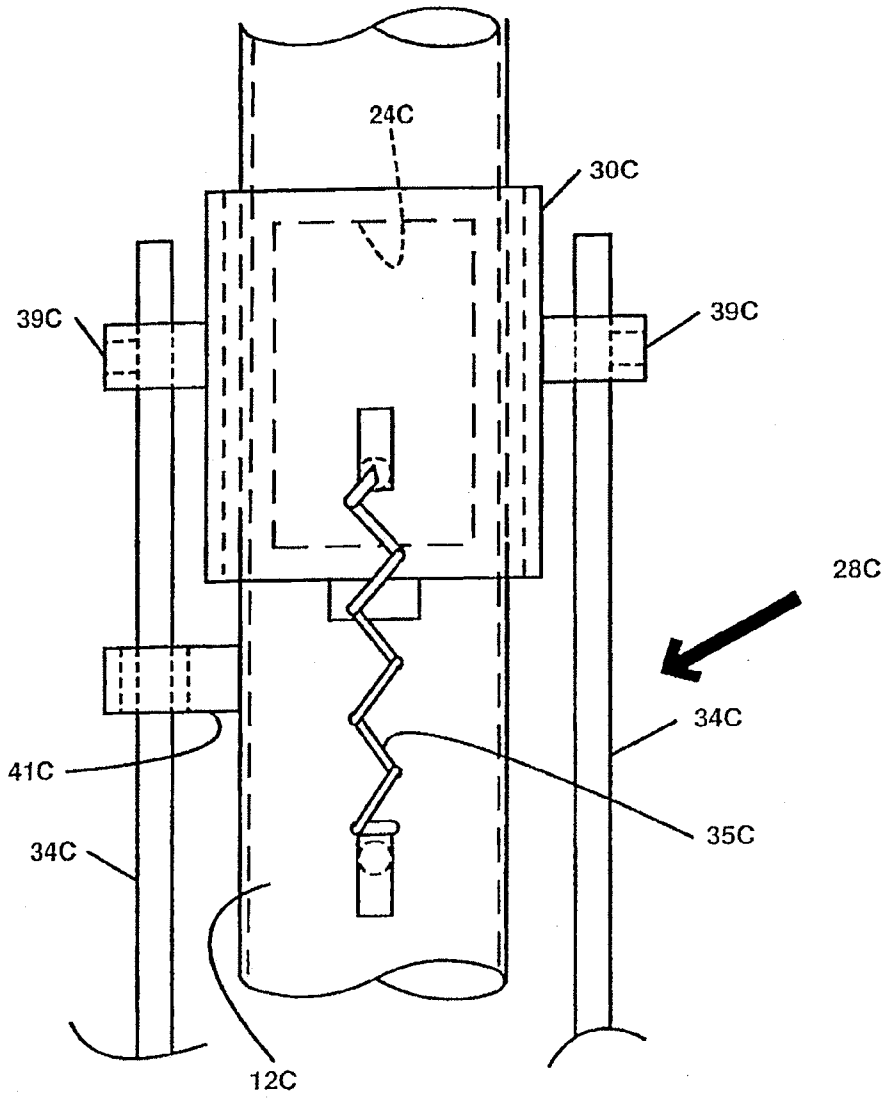


Fig. 19

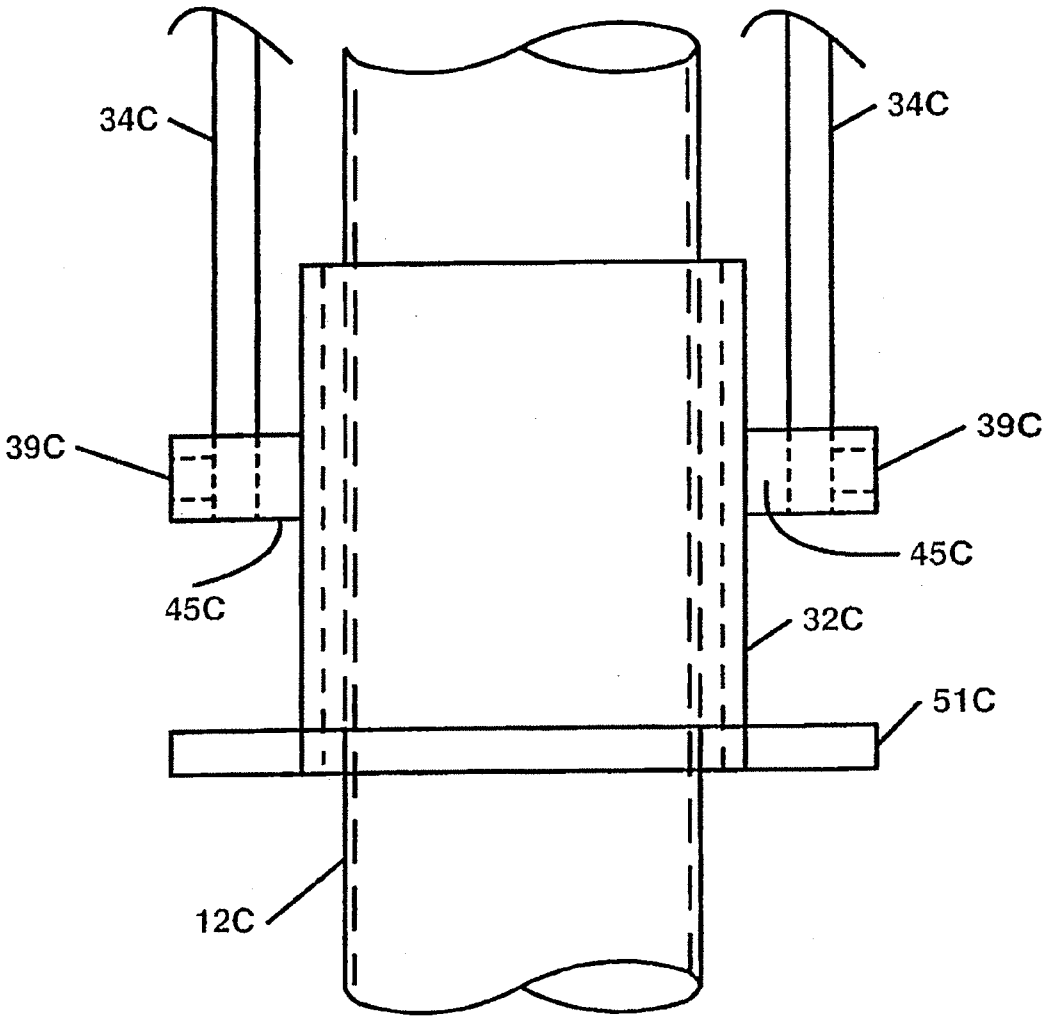


Fig. 20

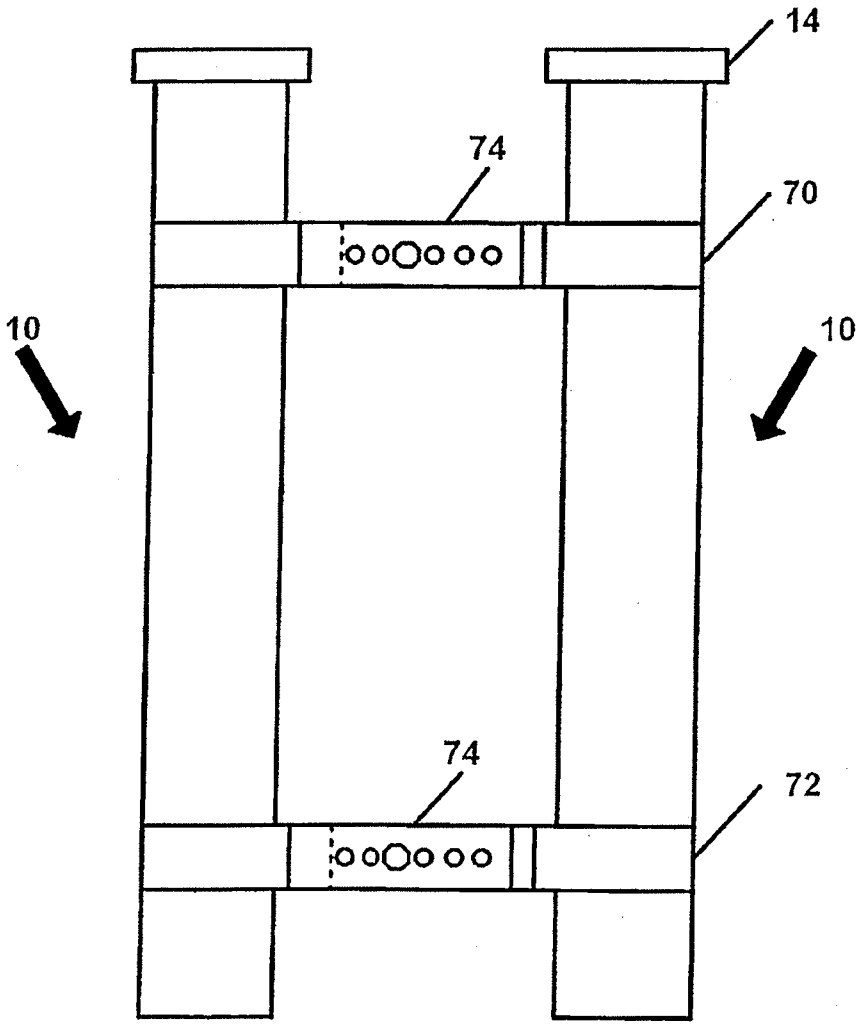


Fig. 21

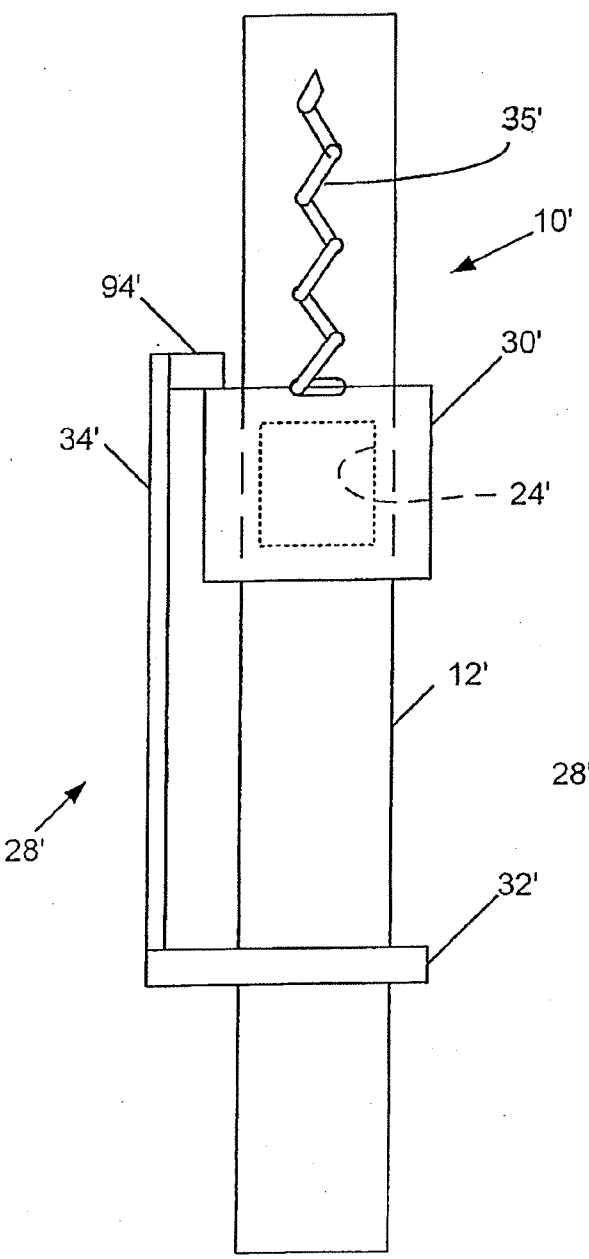


Fig 22

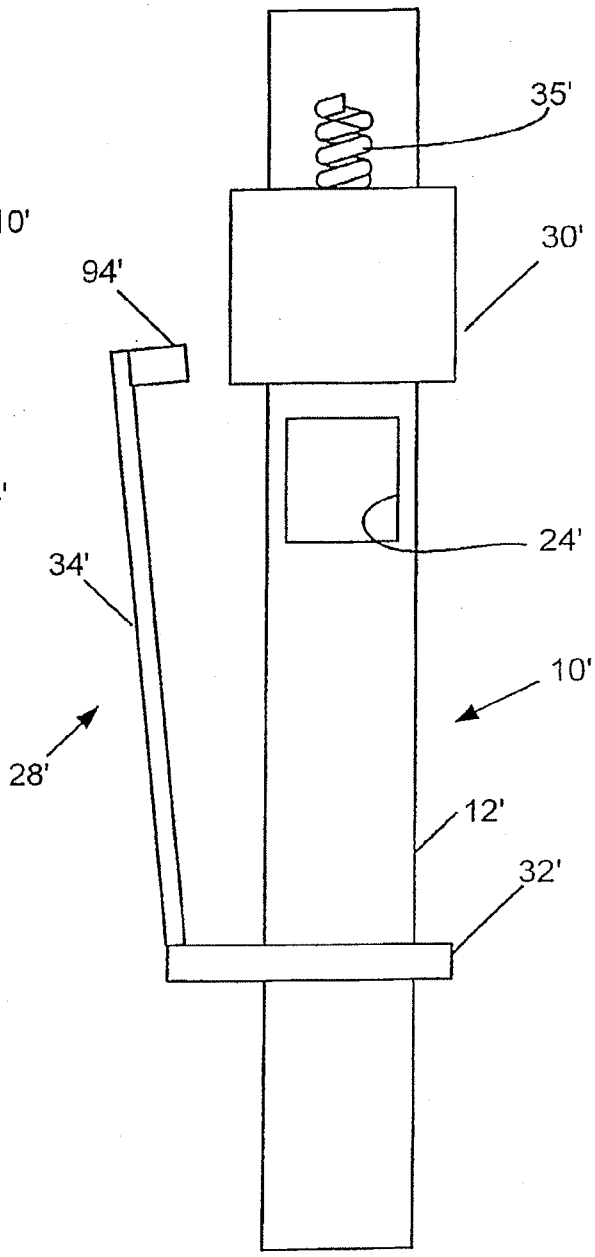


Fig 23

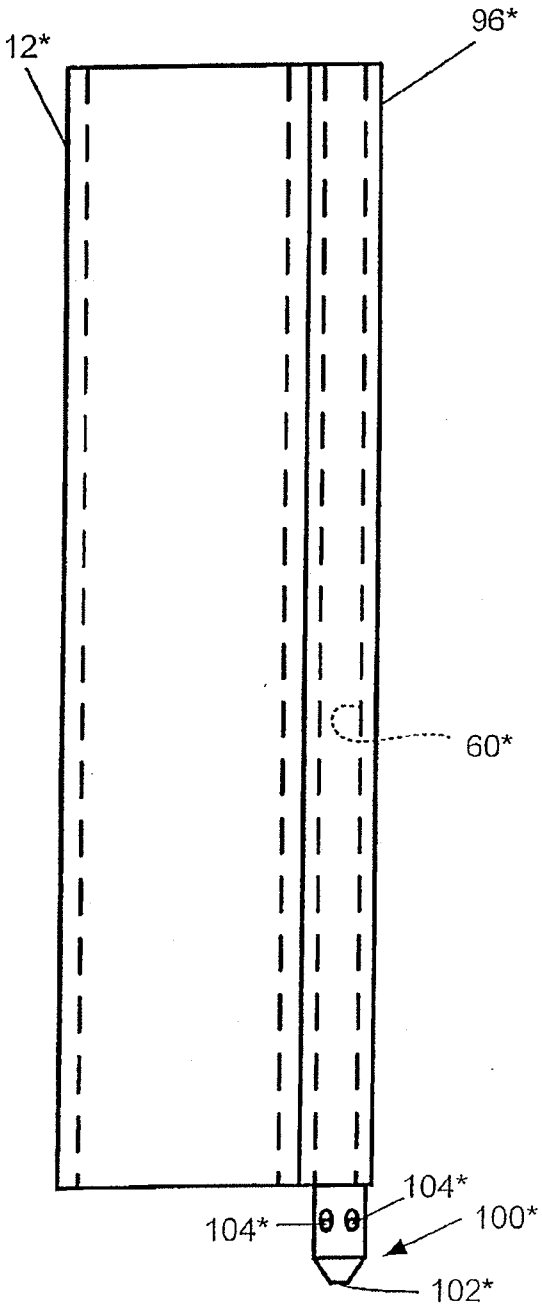


Fig. 24

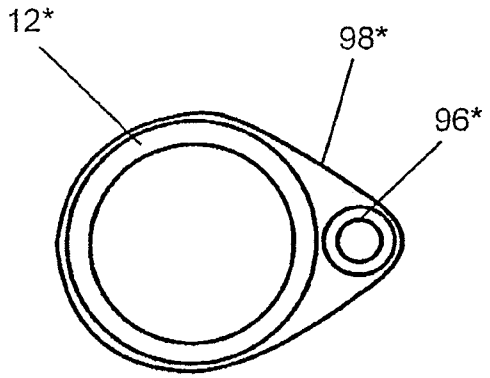


Fig. 25

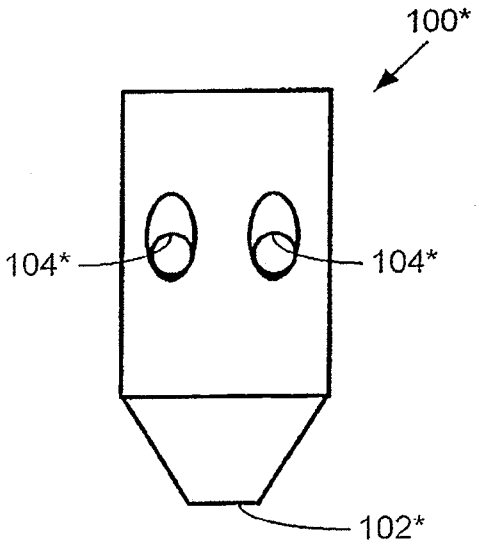


Fig. 26

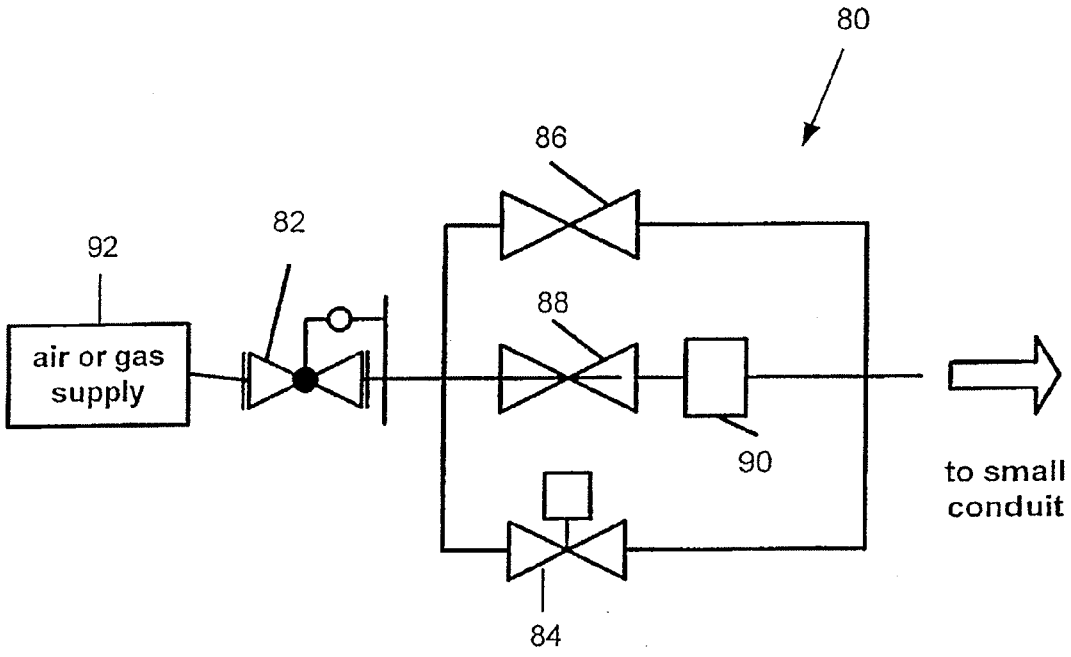


Fig. 27

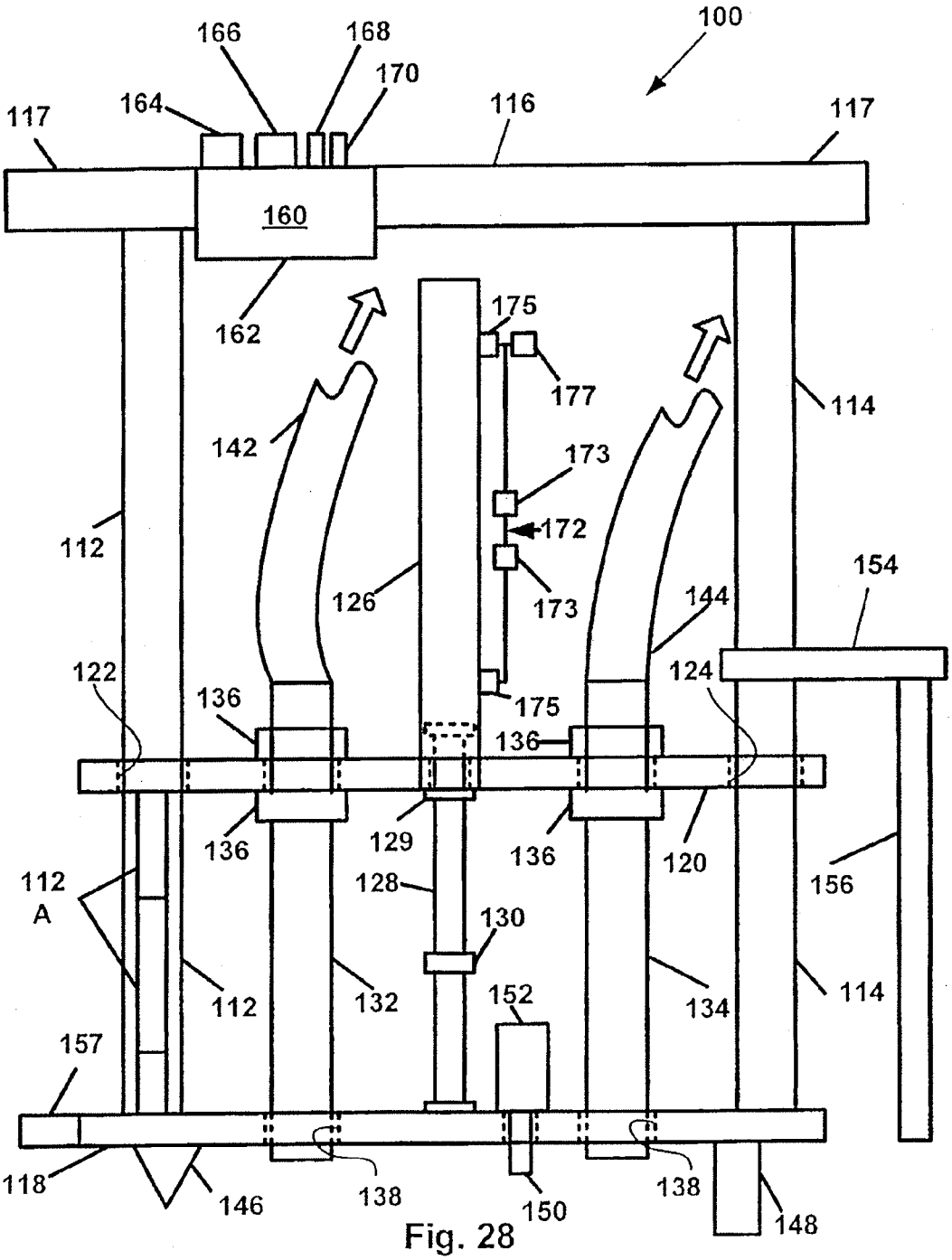

100
166
168
170
164
117
116
117
160
162
175
177
114
142
173
172
112
173
154
126
144
122
136
175
124
136
136
129
136
120
112
A
128
130
156
112
132
152
134
114
157
118
146
138
150
138
148

Fig. 28

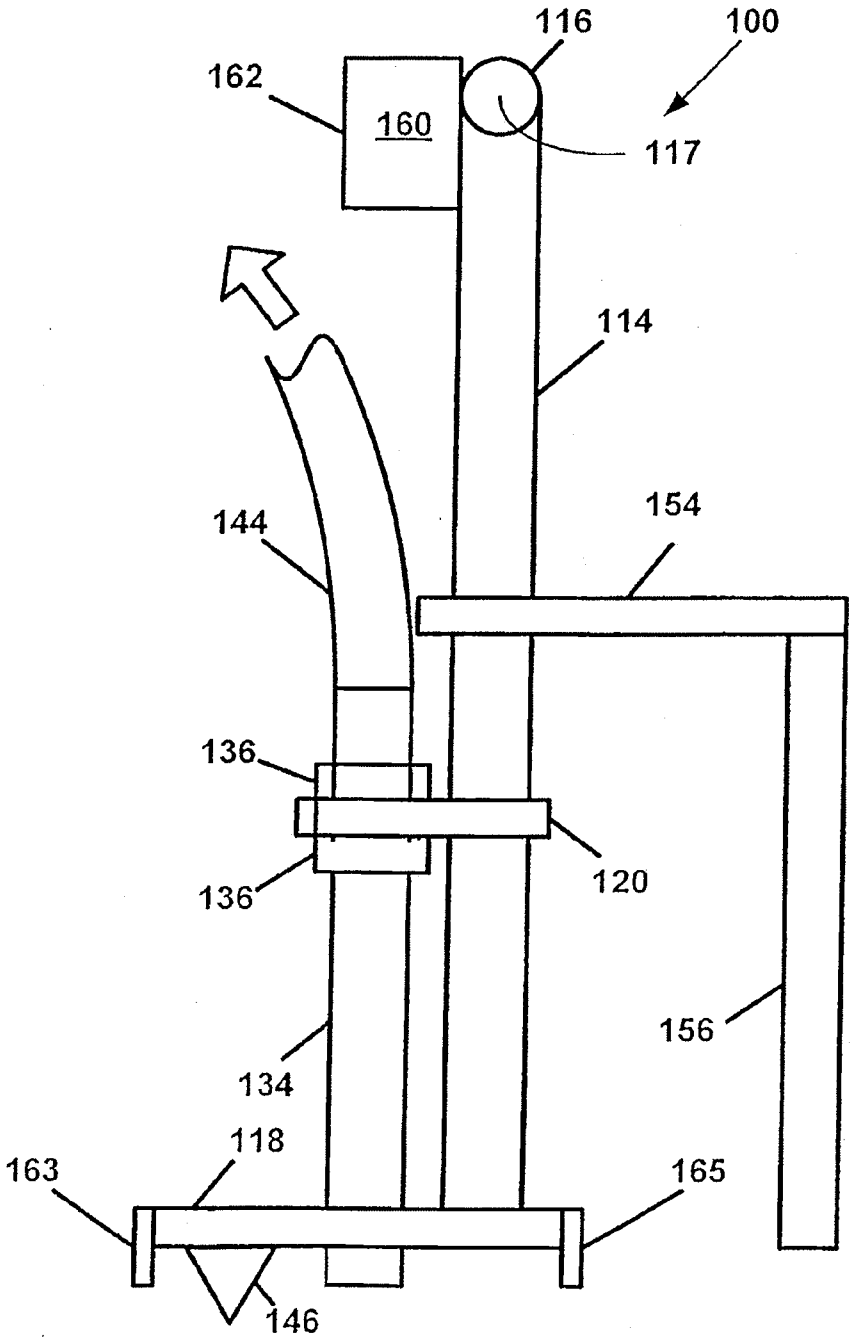

116
100
162
160
117
114
144
154
136
120
136
156
134
118
163
165
146

Fig. 29

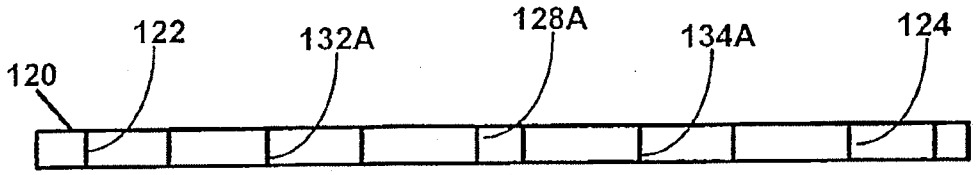


Fig. 30

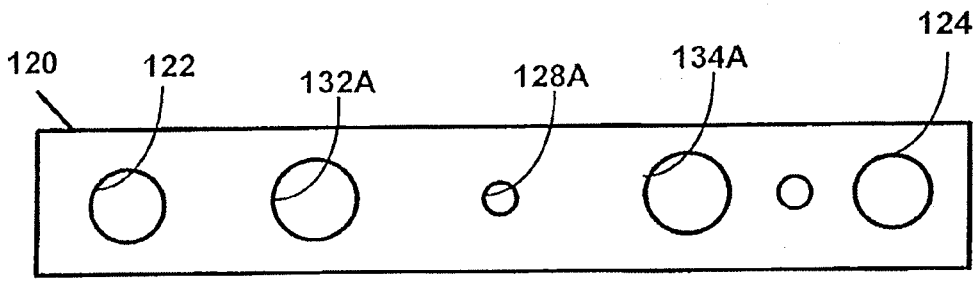


Fig. 31

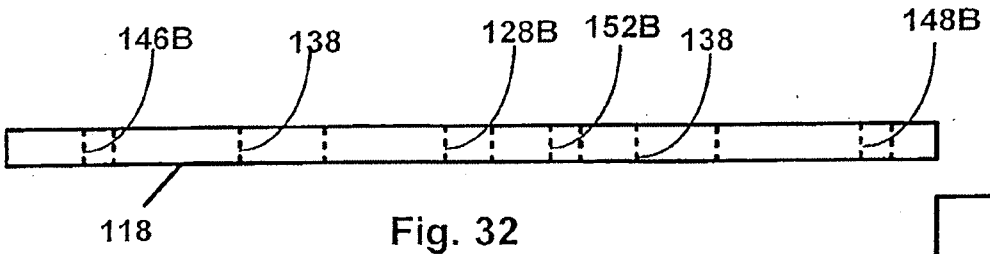


Fig. 32

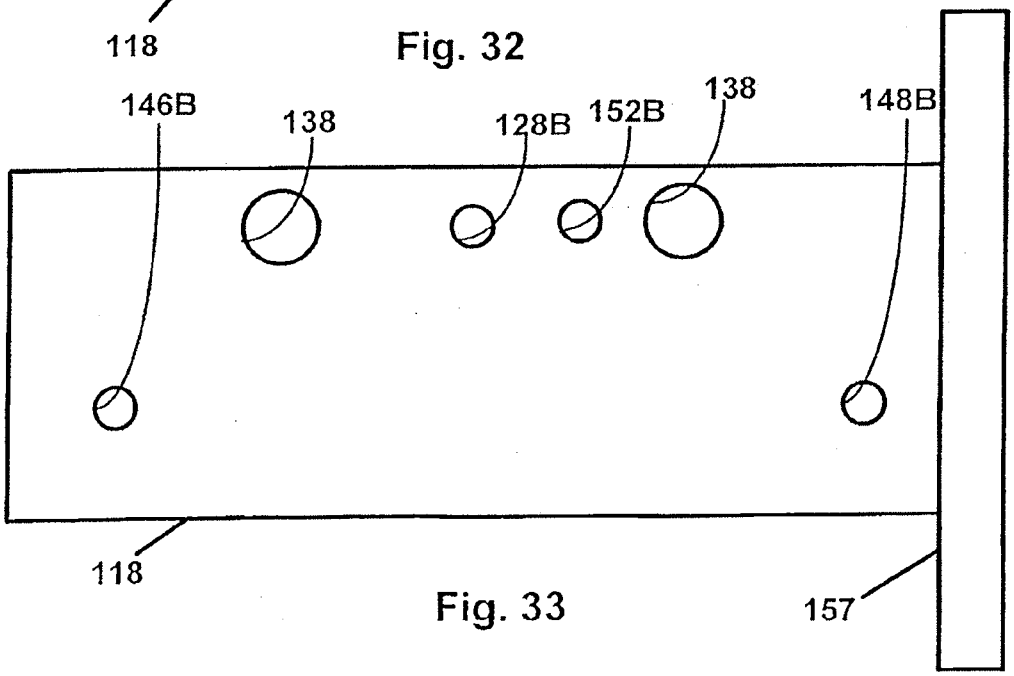


Fig. 33

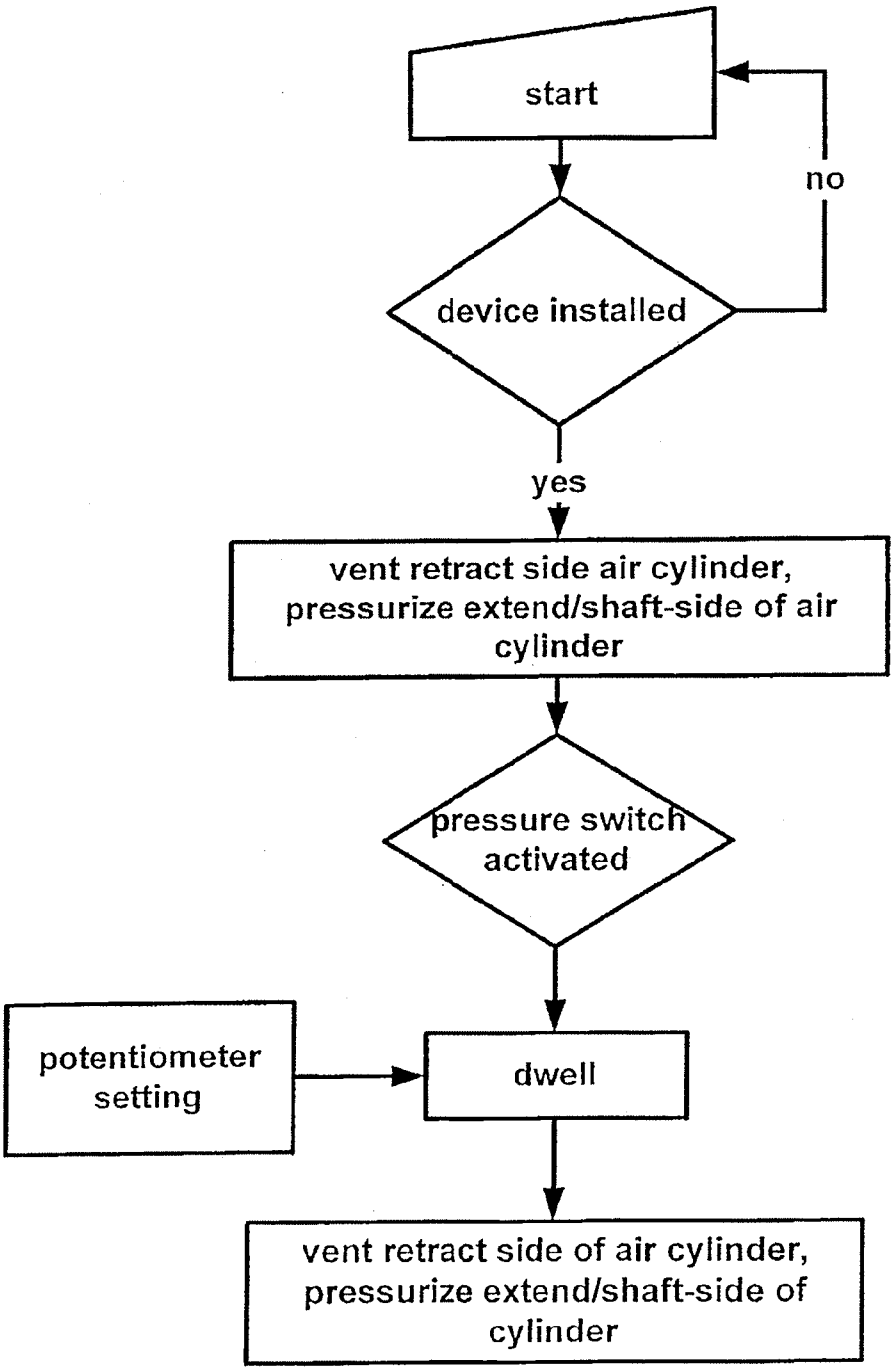

start
no
device installed
yes
vent retract side air cylinder, pressurize extend/shaft-side of air cylinder
pressure switch activated
potentiometer setting
dwell
vent retract side of air cylinder, pressurize extend/shaft-side of cylinder

Fig. 34

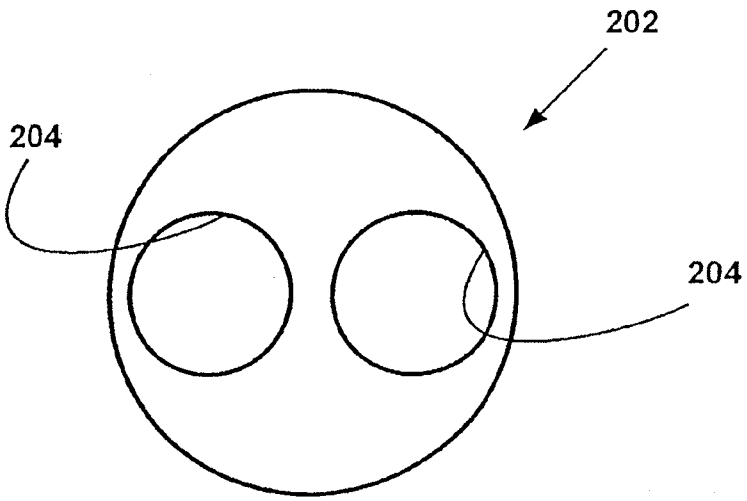


Fig. 35

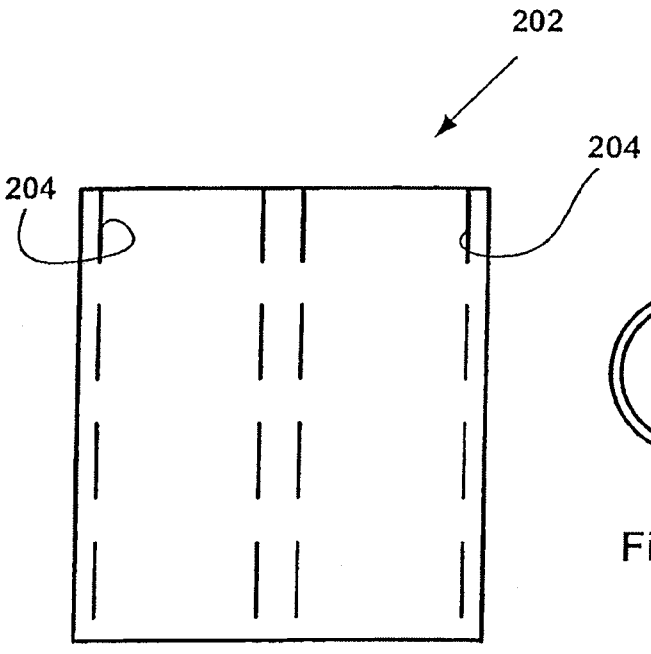


Fig. 36

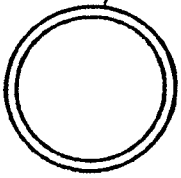


Fig. 37

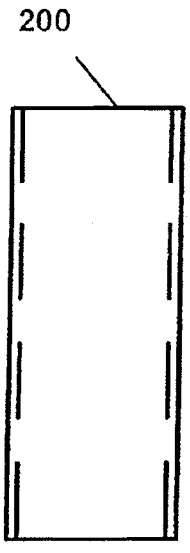


Fig. 38

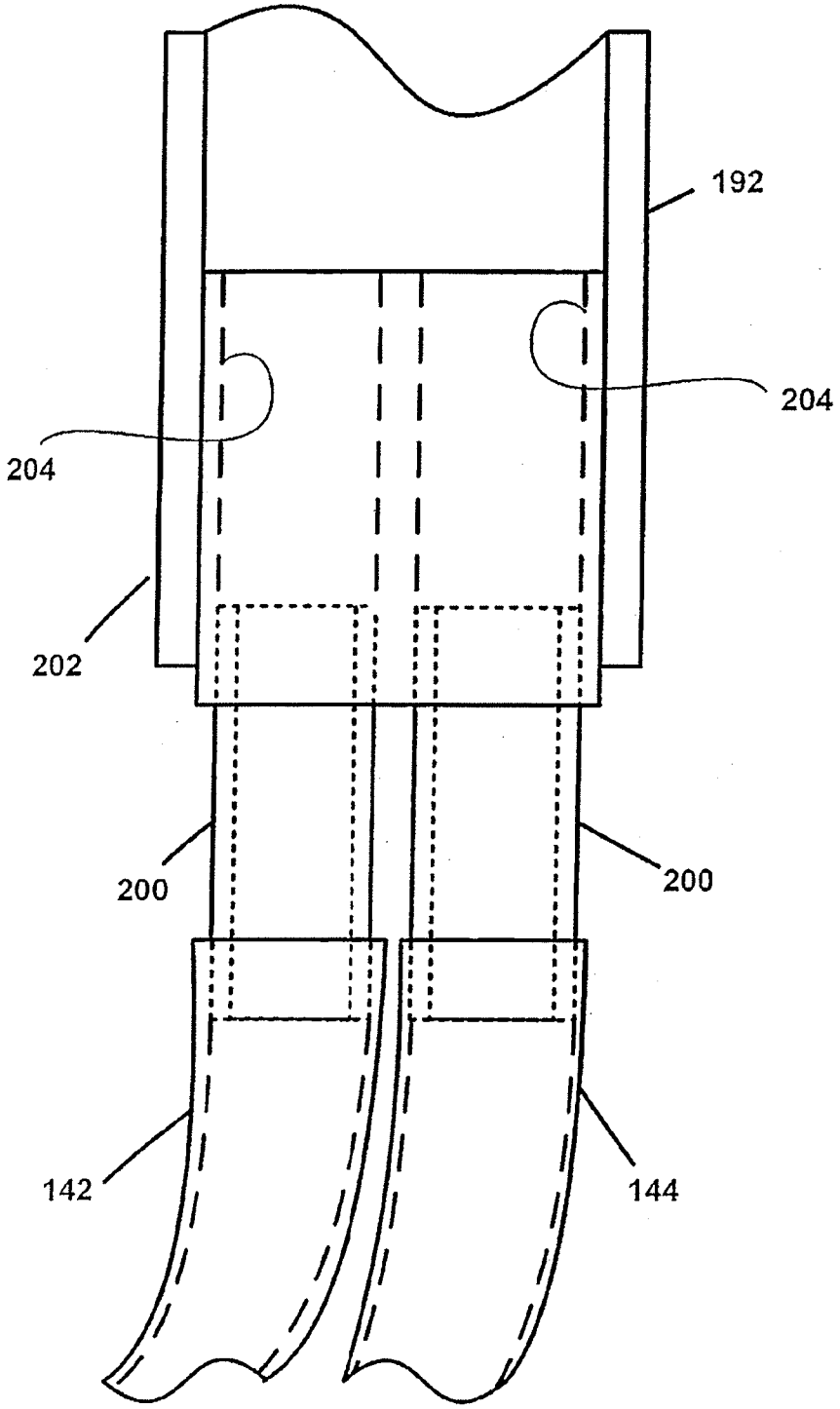


Fig. 39

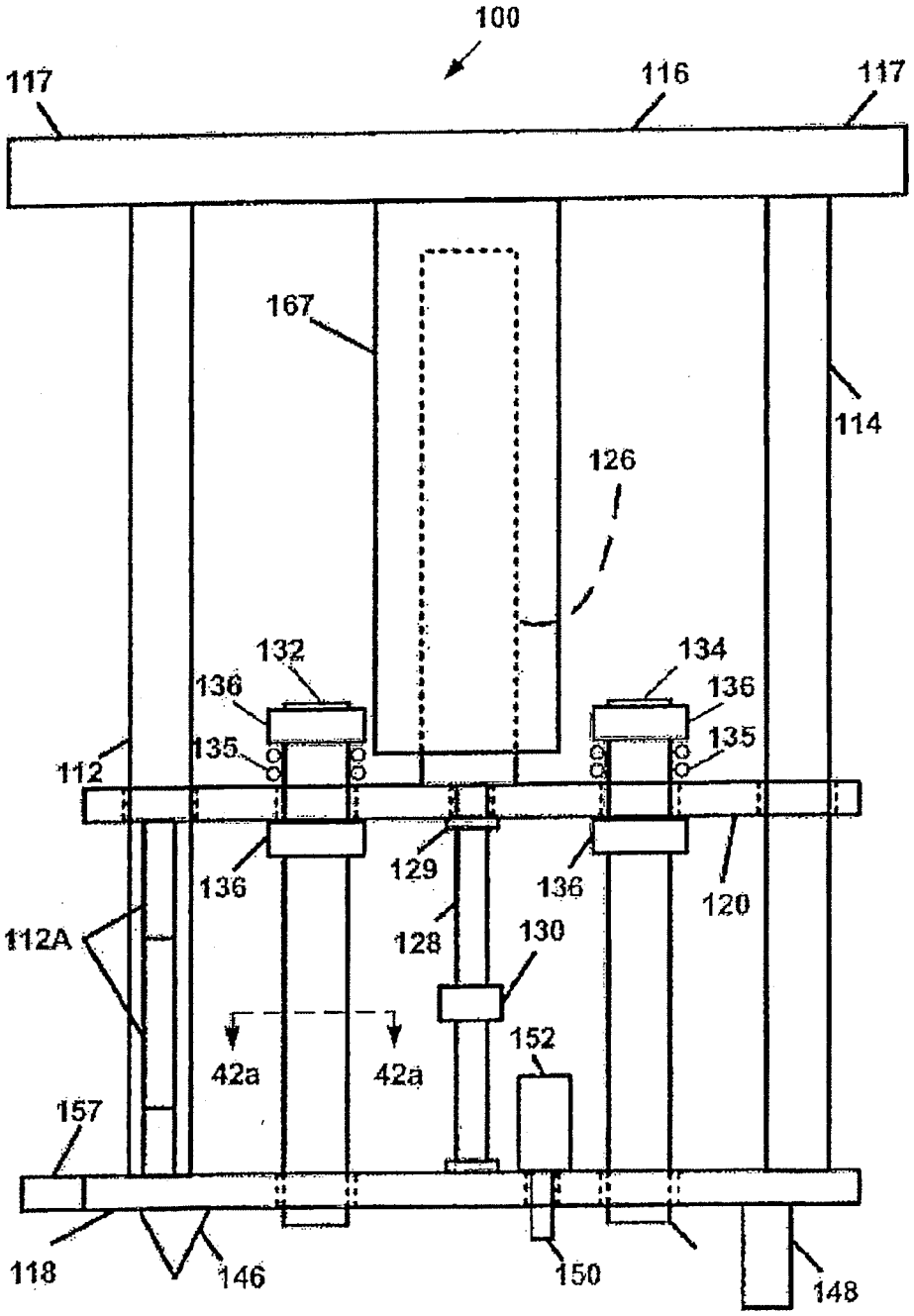

100
117
116
117
167
114
126
132
134
136
136
135
135
112
136
129
136
120
112A
128
130
42a
42a
152
157
118
146
150
148

Fig. 40

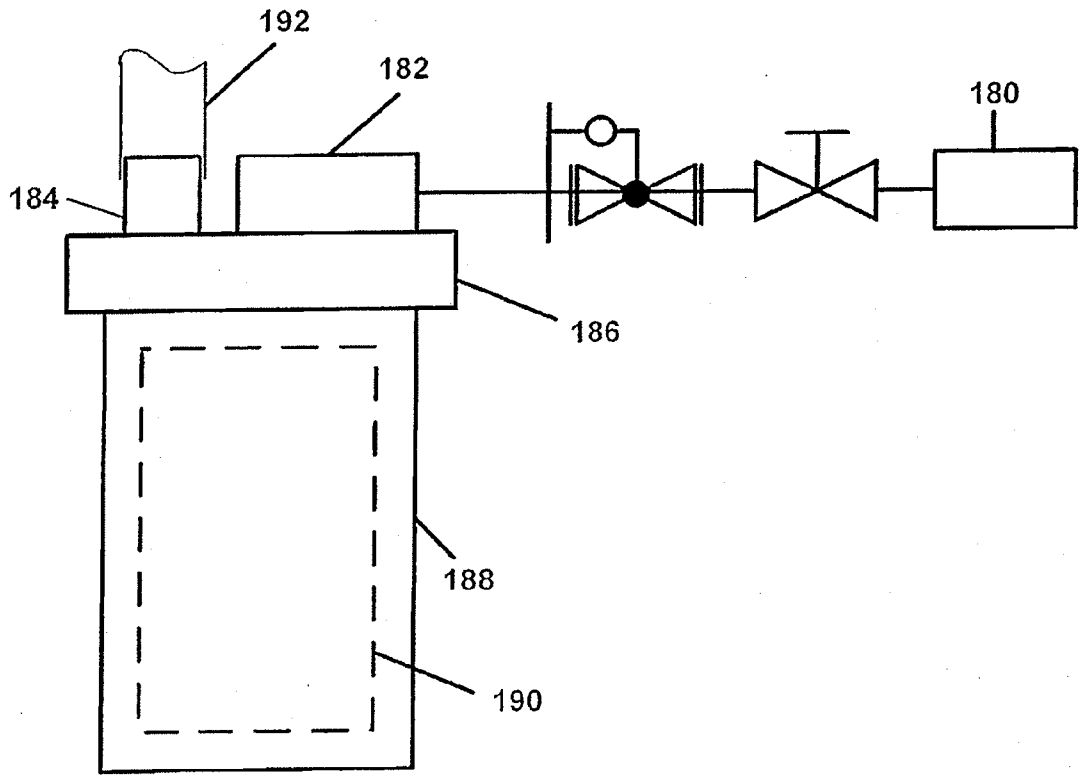


Fig. 41

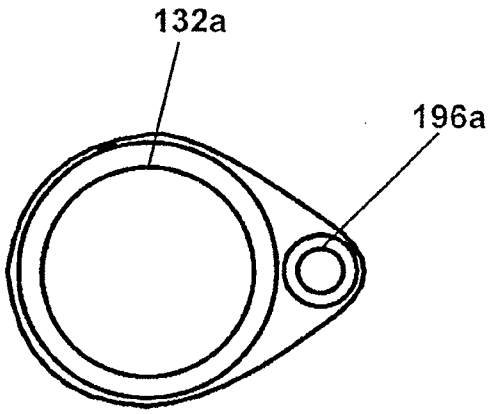


Fig. 42a

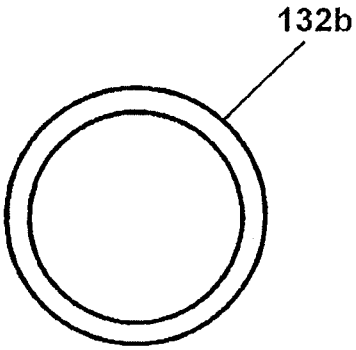


Fig. 42b

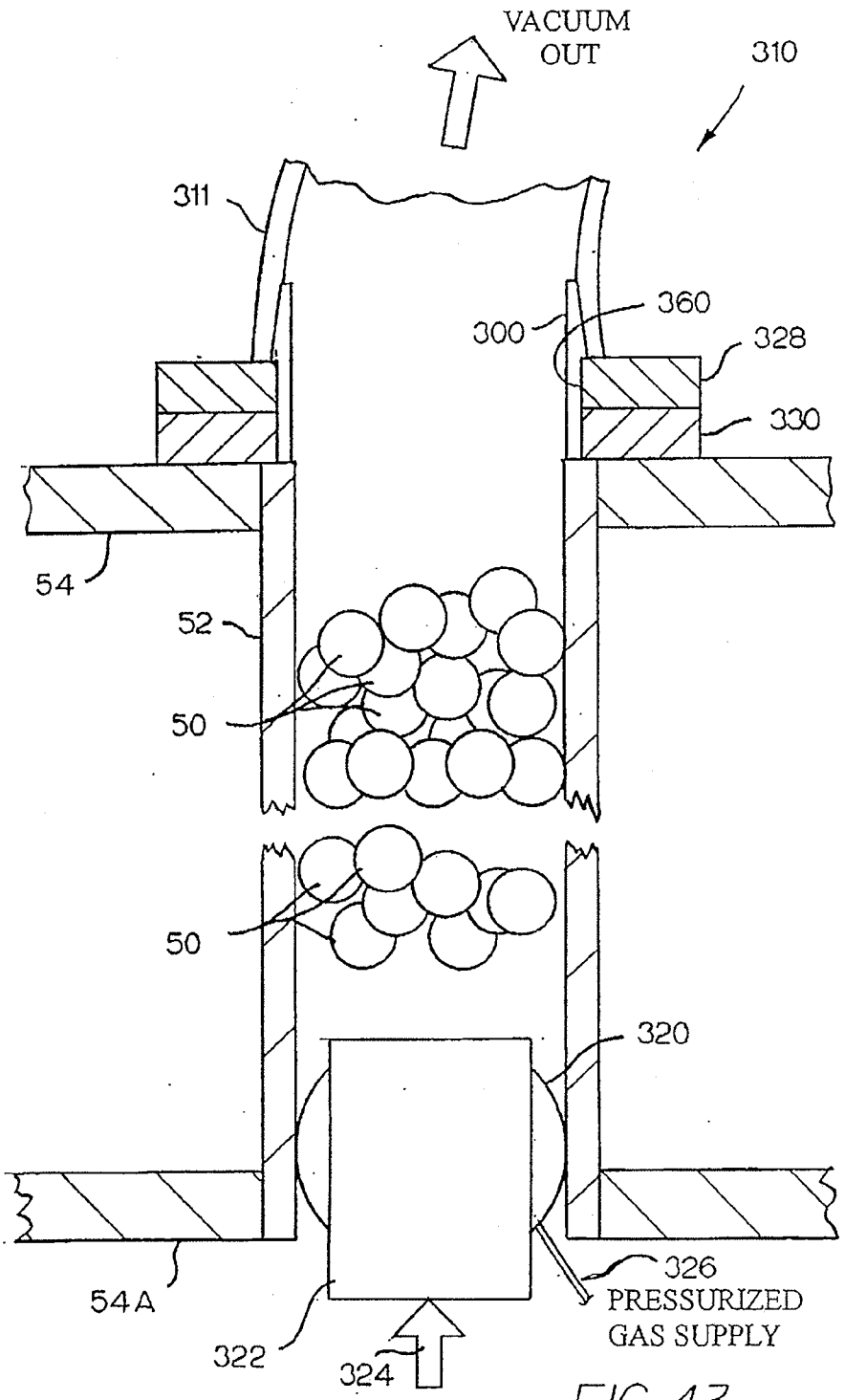

VACUUM
OUT
310
311
360
300
328
330
54
52
50
50
320
54A
322
324
326
PRESSURIZED
GAS SUPPLY

FIG.43

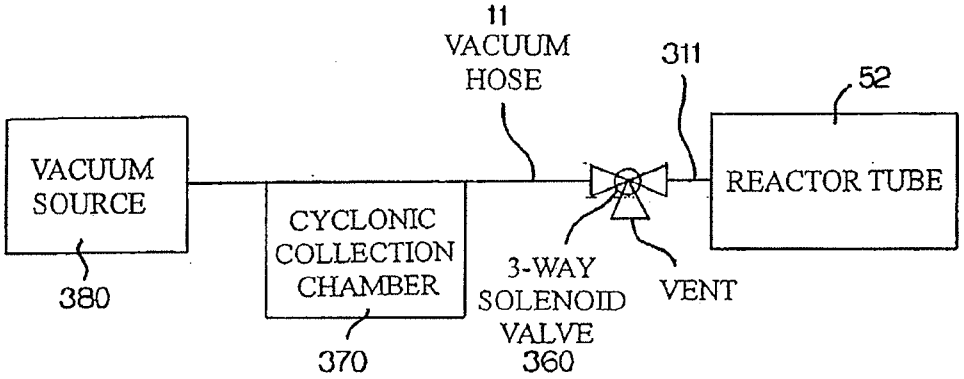

11
VACUUM
HOSE
311
52
VACUUM
SOURCE
CYCLONIC
COLLECTION
CHAMBER
REACTOR TUBE
3-WAY
SOLENOID
VALVE
VENT
380
370
360

FIG. 44

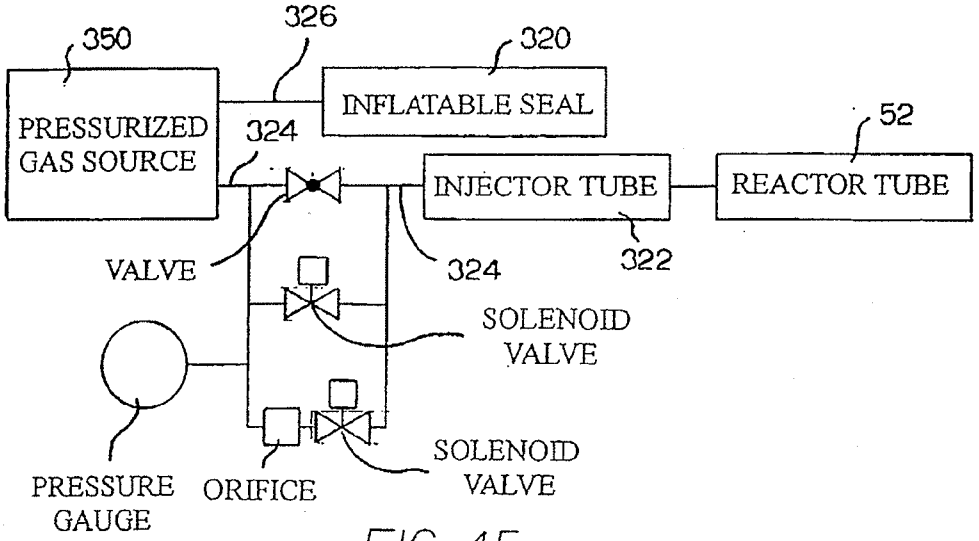

326
350
320
PRESSURIZED
GAS SOURCE
324
INFLATABLE SEAL
52
INJECTOR TUBE
REACTOR TUBE
VALVE
324
322
SOLENOID
VALVE
PRESSURE
GAUGE
ORIFICE
SOLENOID
VALVE

FIG. 45

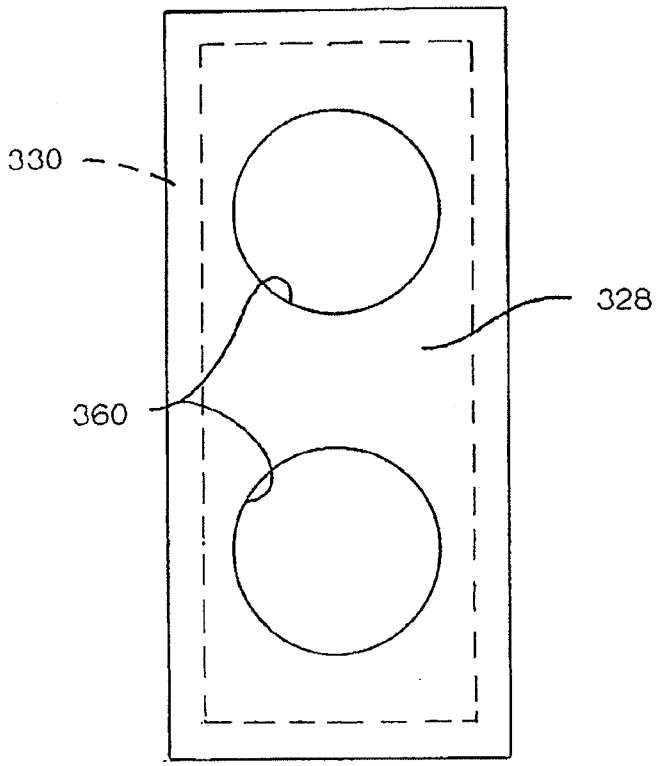


FIG. 46