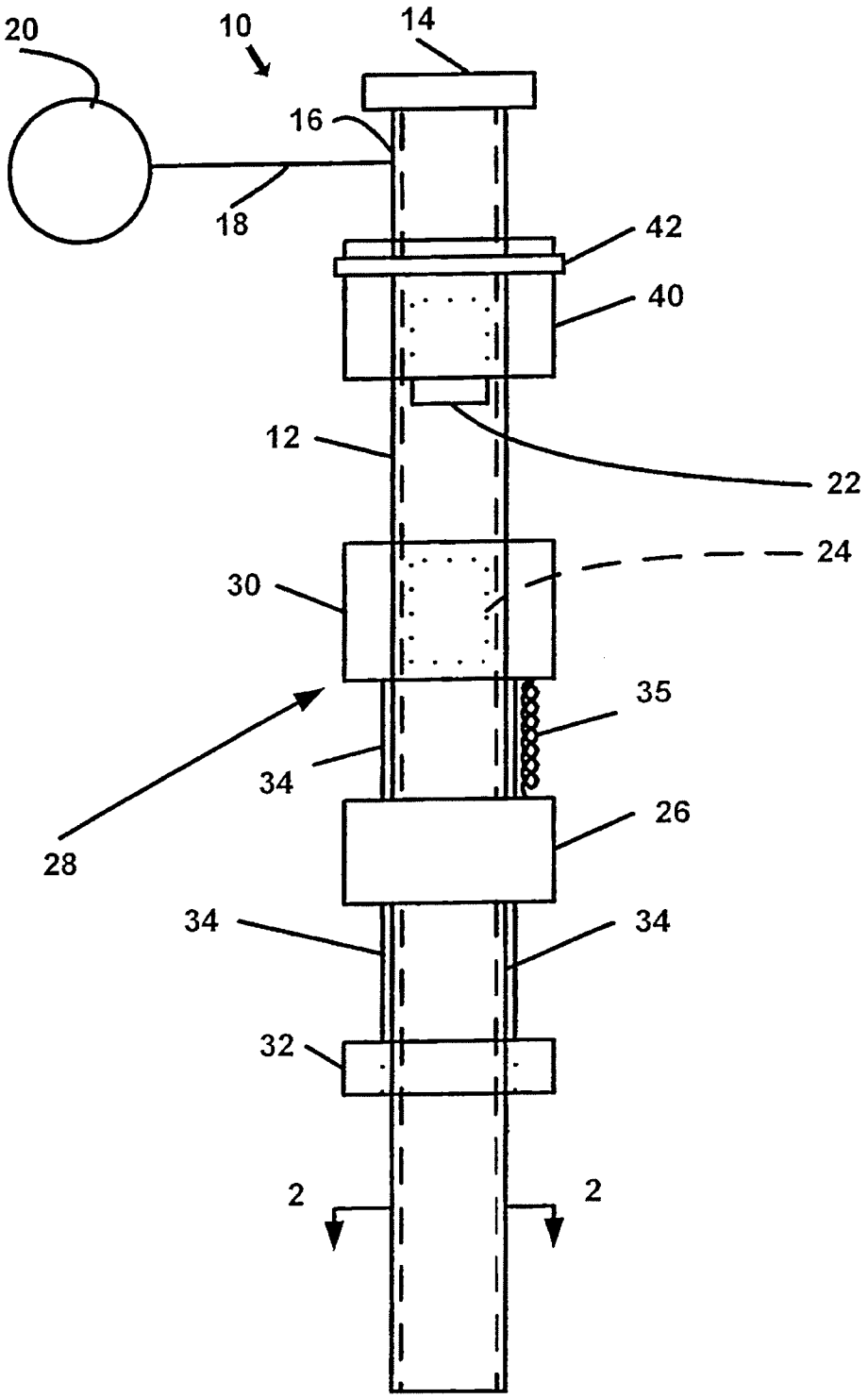


Fig. 1

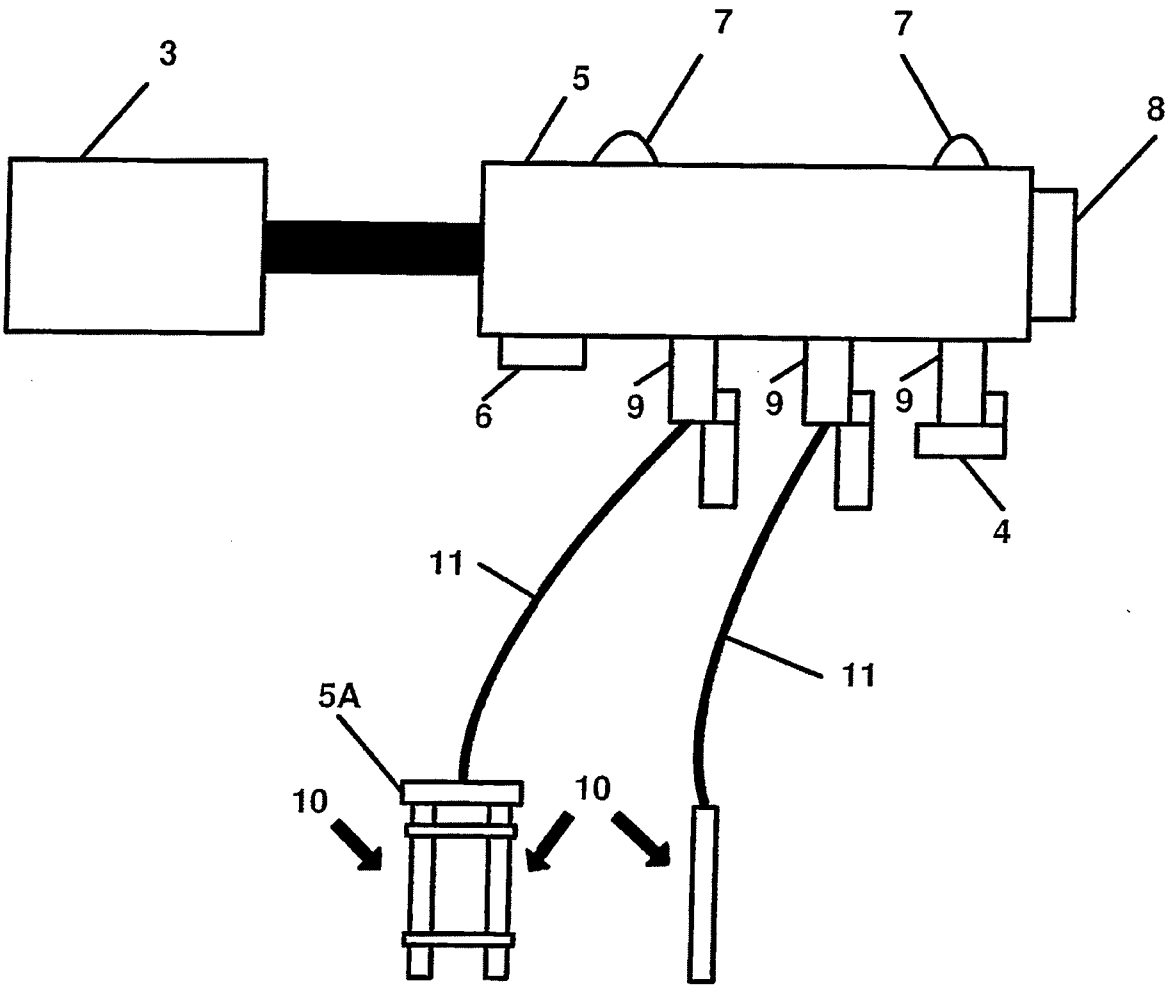


Fig. 1A

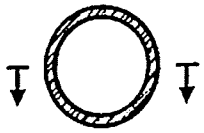


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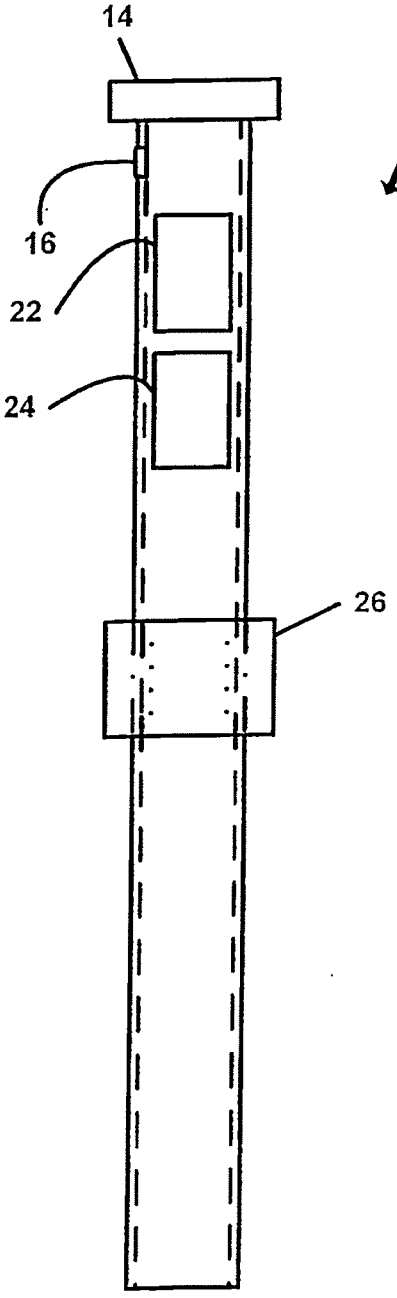


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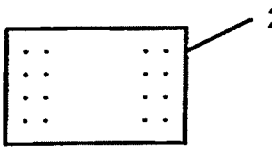


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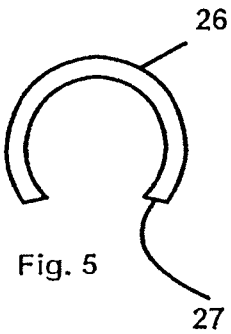


Fig. 5

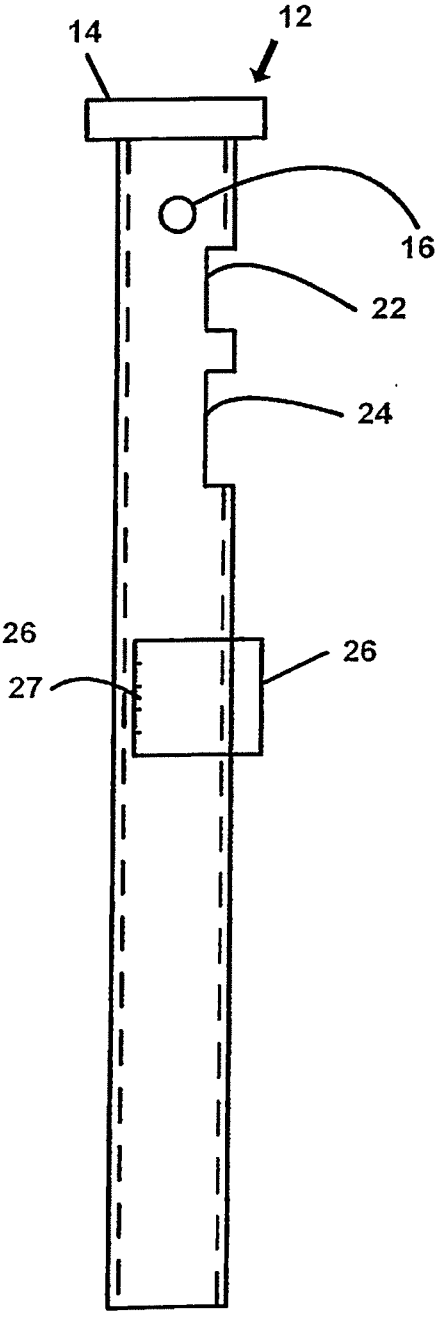


Fig. 6

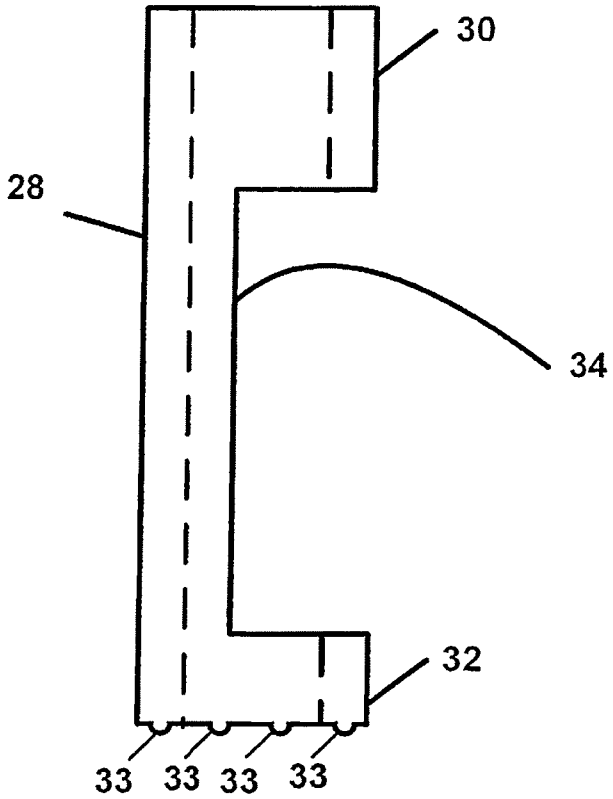


Fig. 7

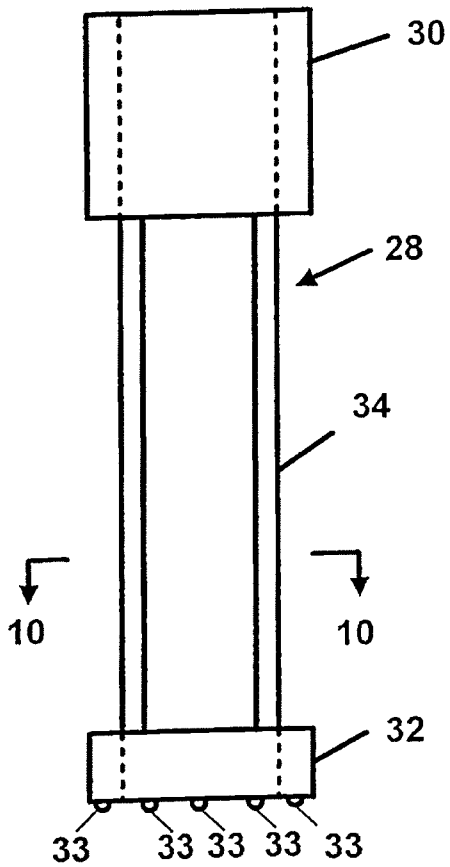


Fig. 8

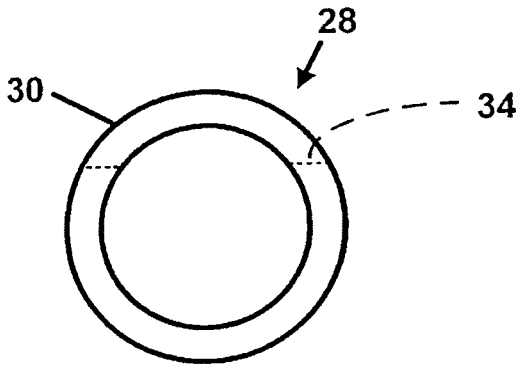


Fig. 9

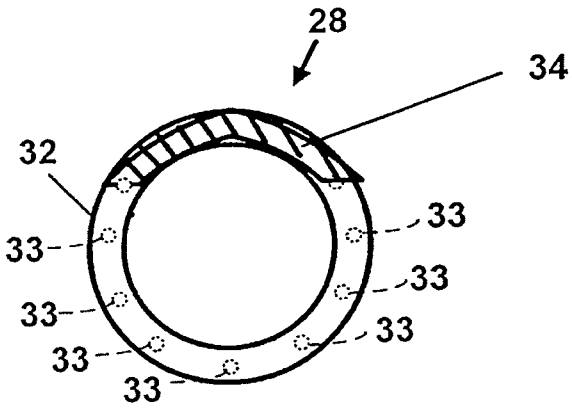


Fig. 10

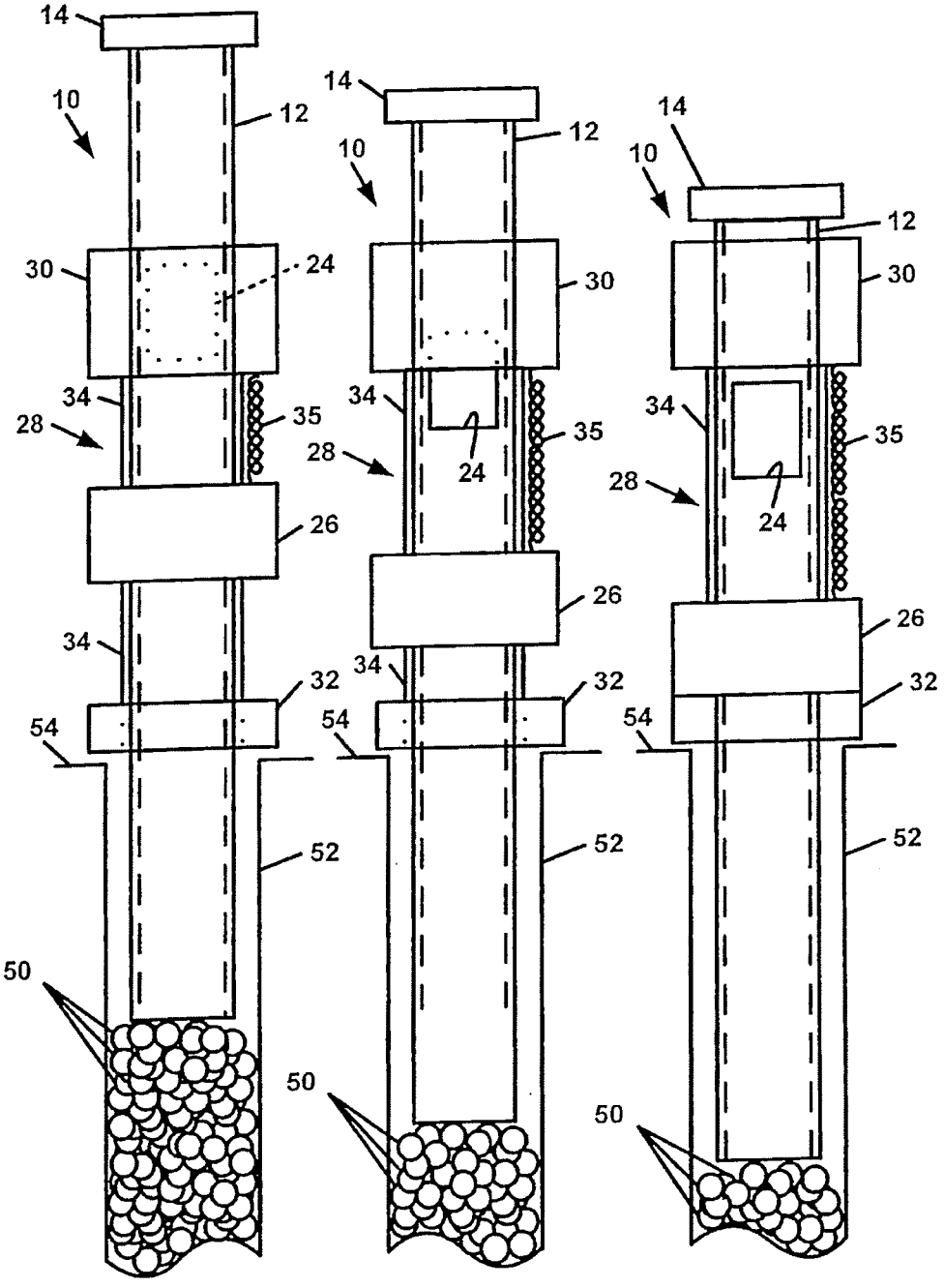


Fig. 11

Fig. 12

Fig. 13

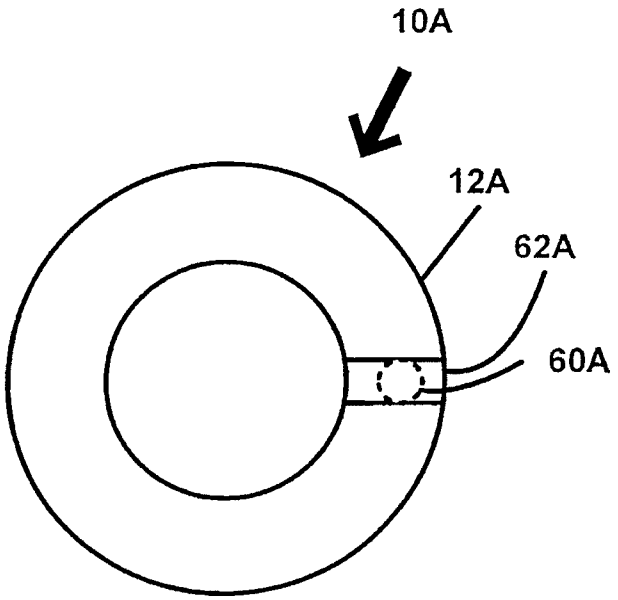


Fig. 14

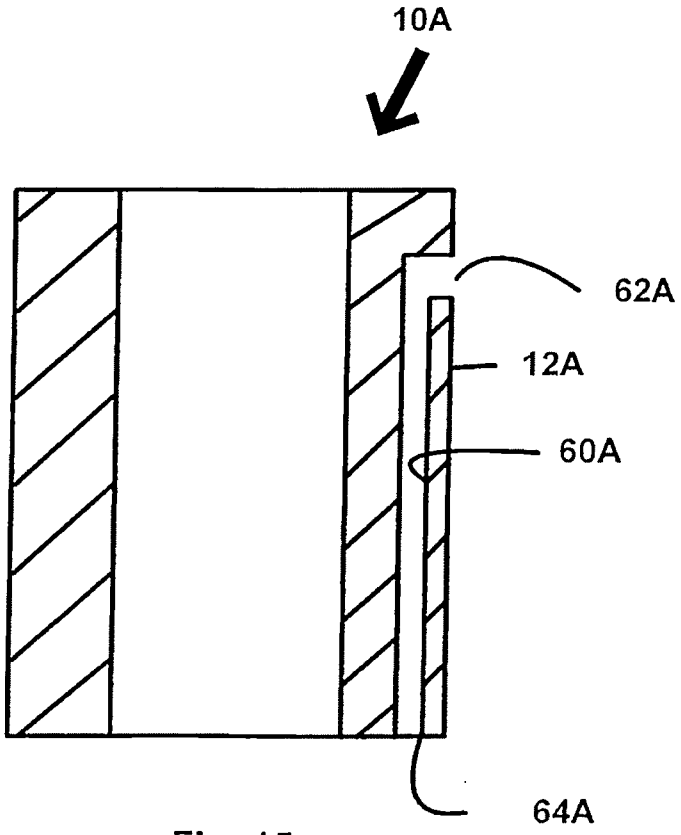


Fig. 15

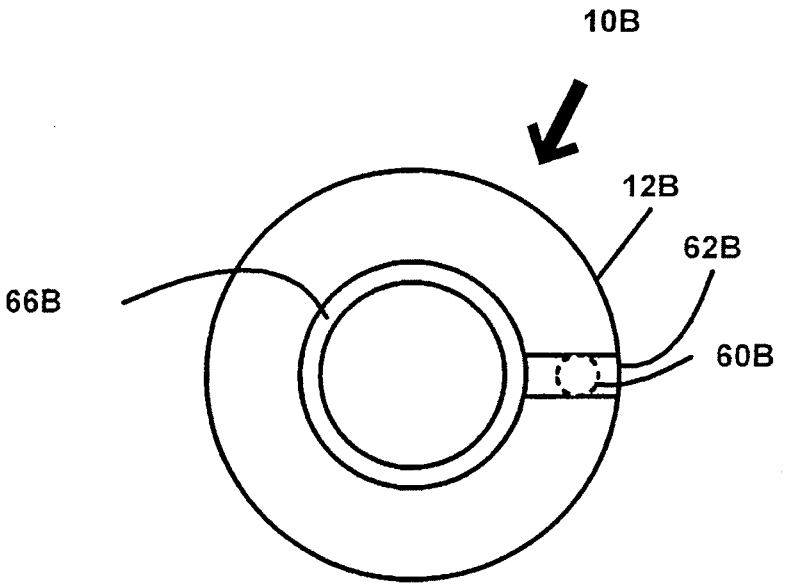


Fig. 16

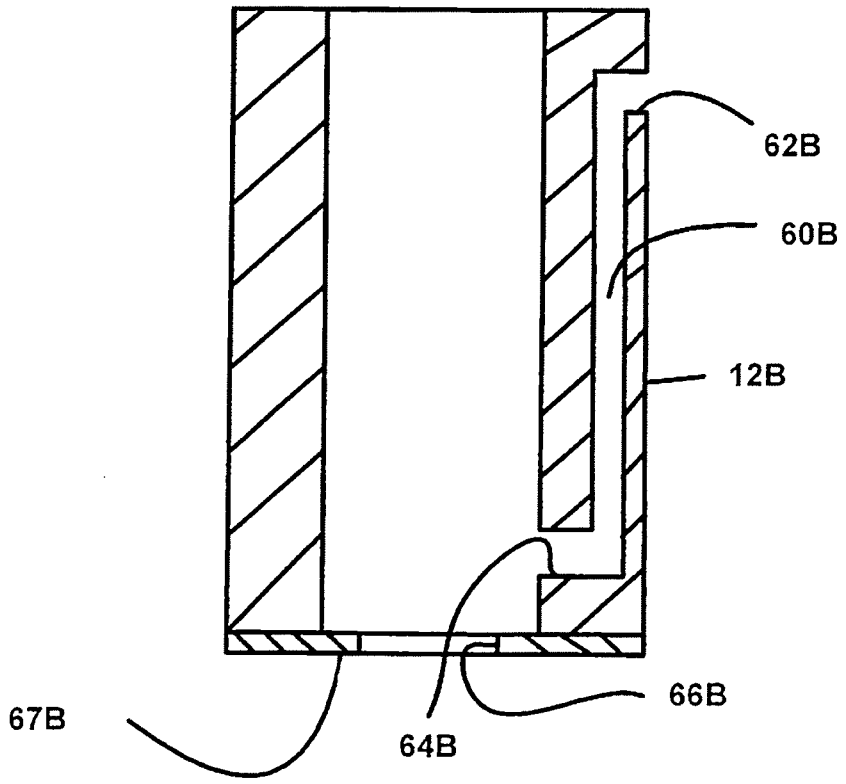


Fig. 17

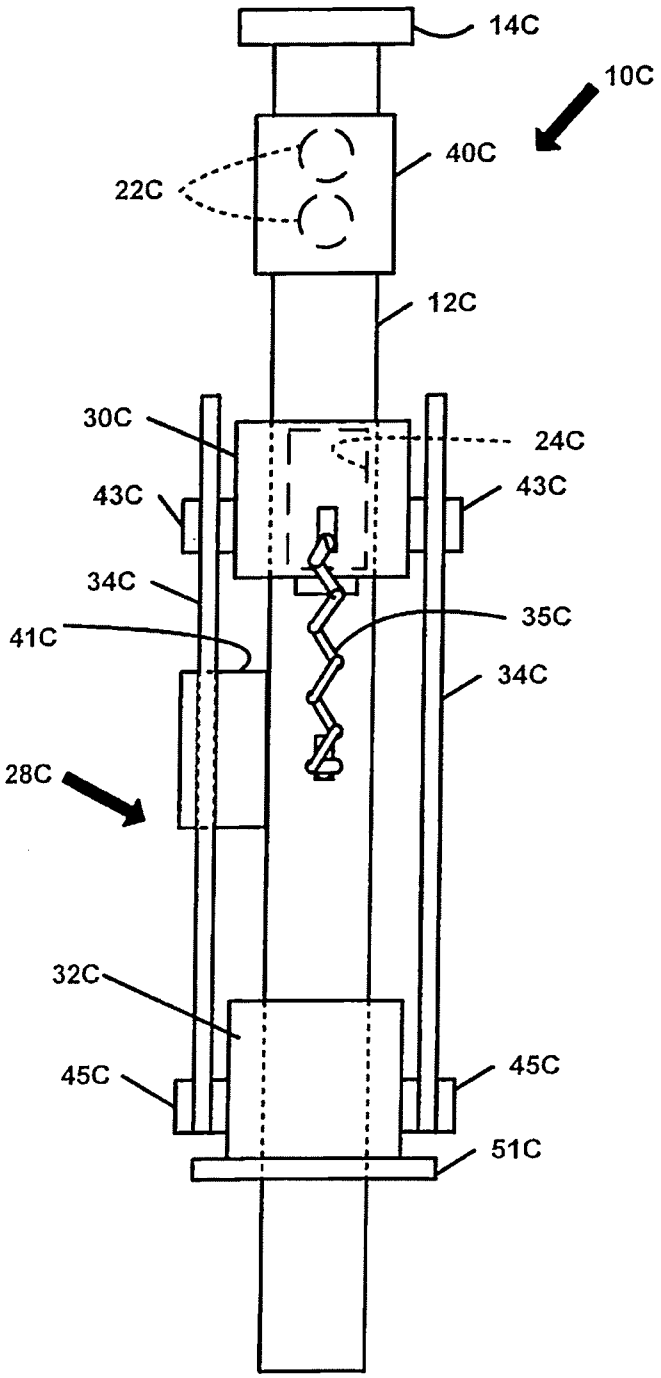

14C
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40C
22C
12C
30C
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43C
34C
35C
41C
34C
28C
32C
45C
45C
51C

Fig. 18

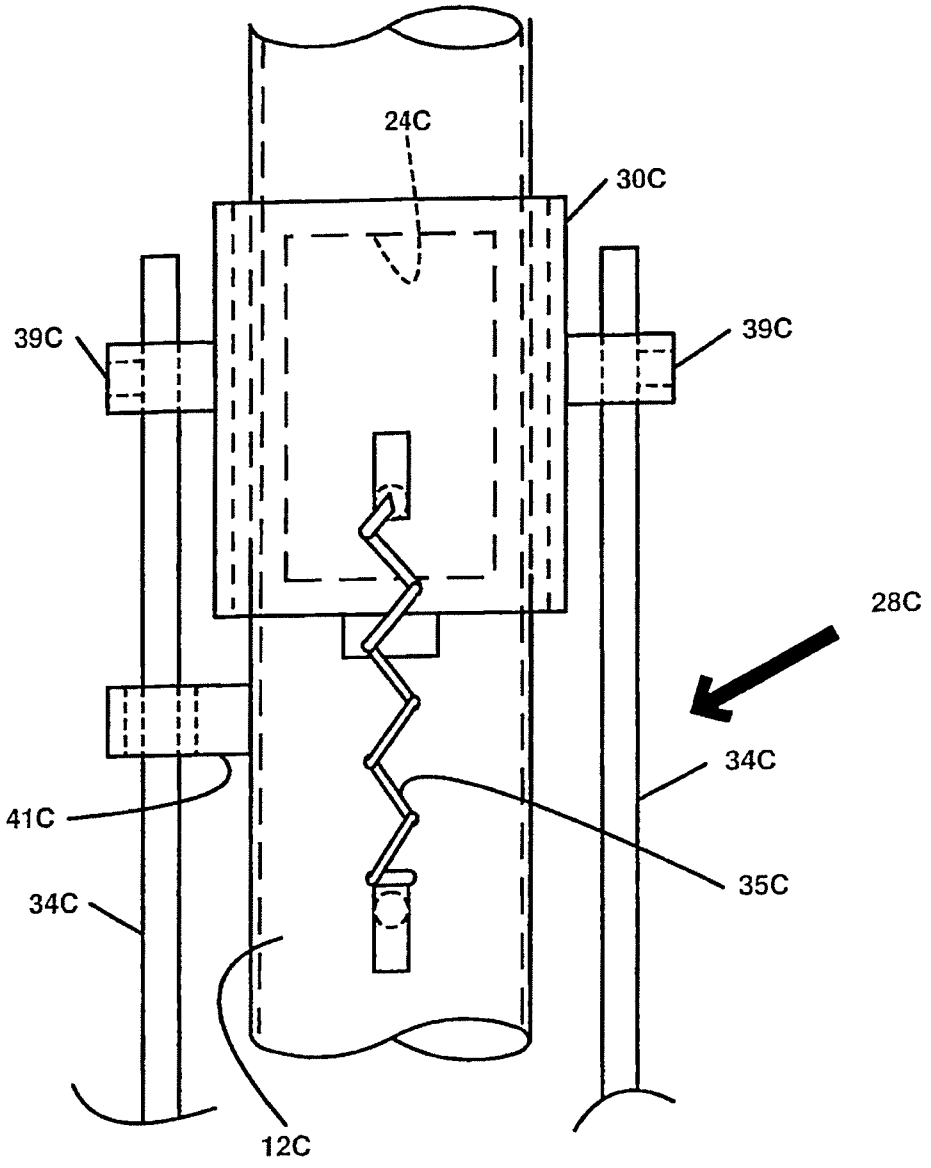


Fig. 19

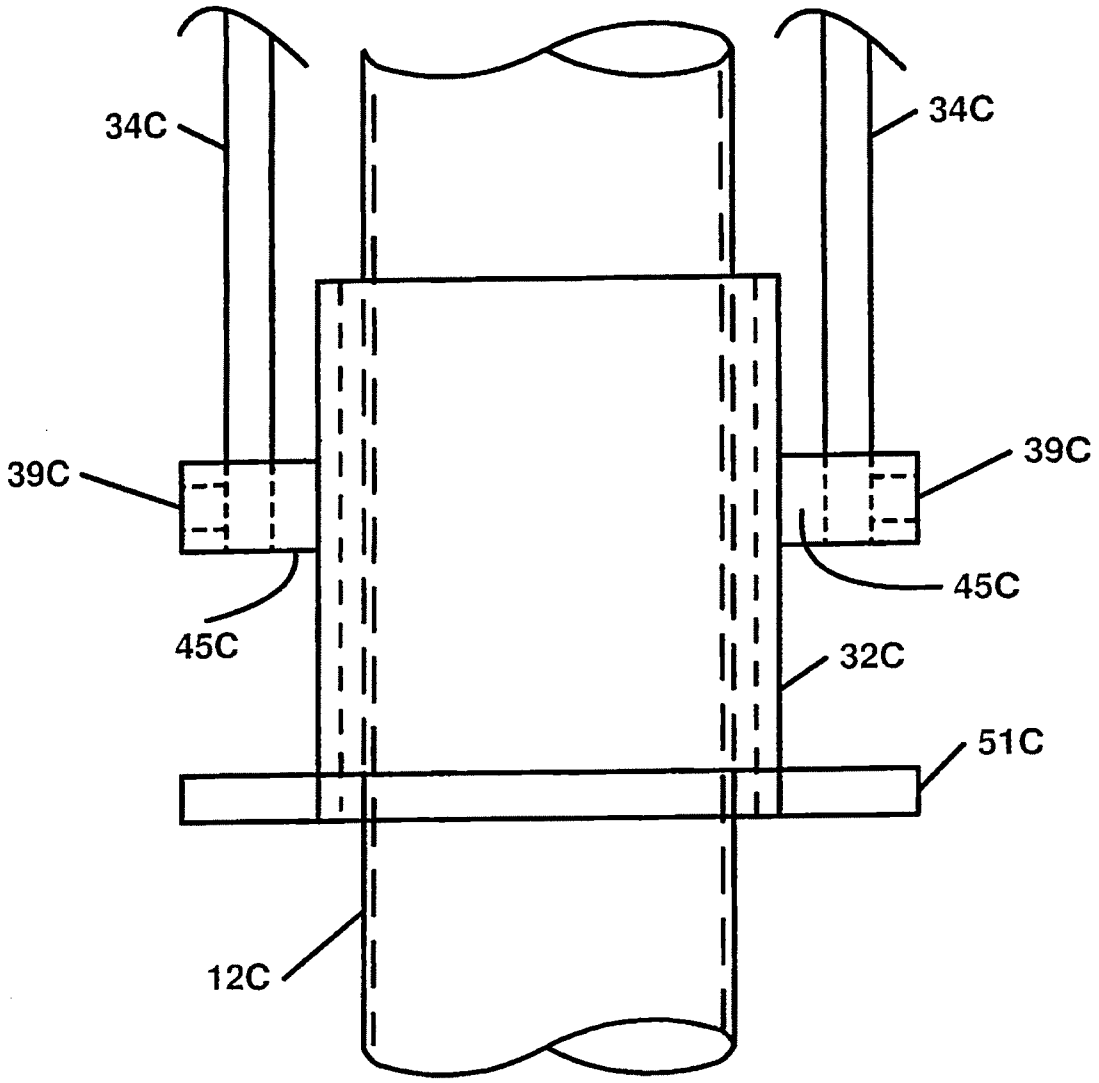


Fig. 20

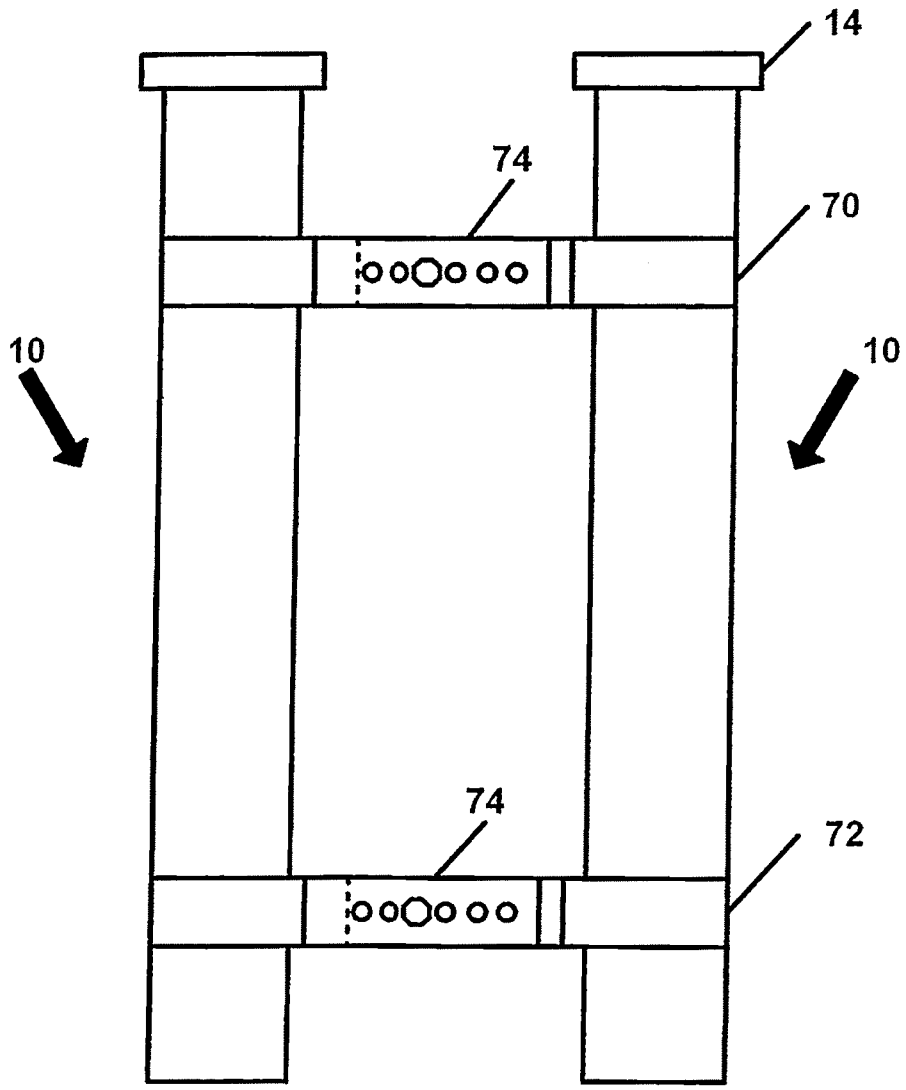


Fig. 21

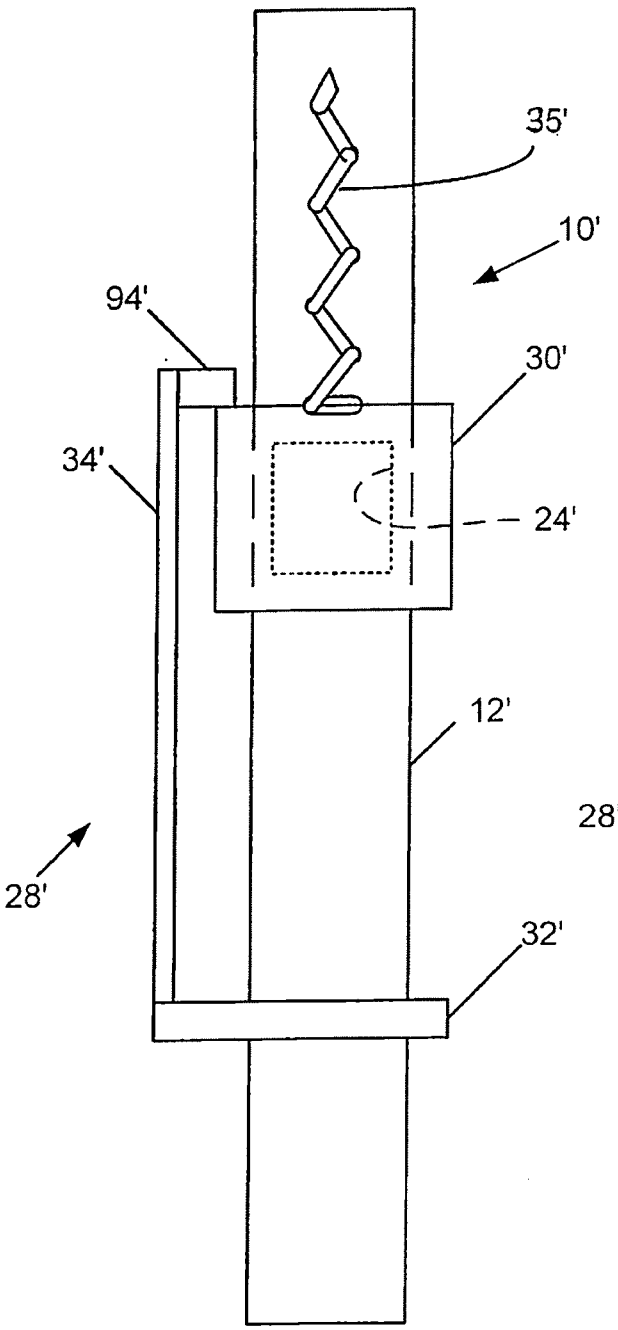


Fig 22

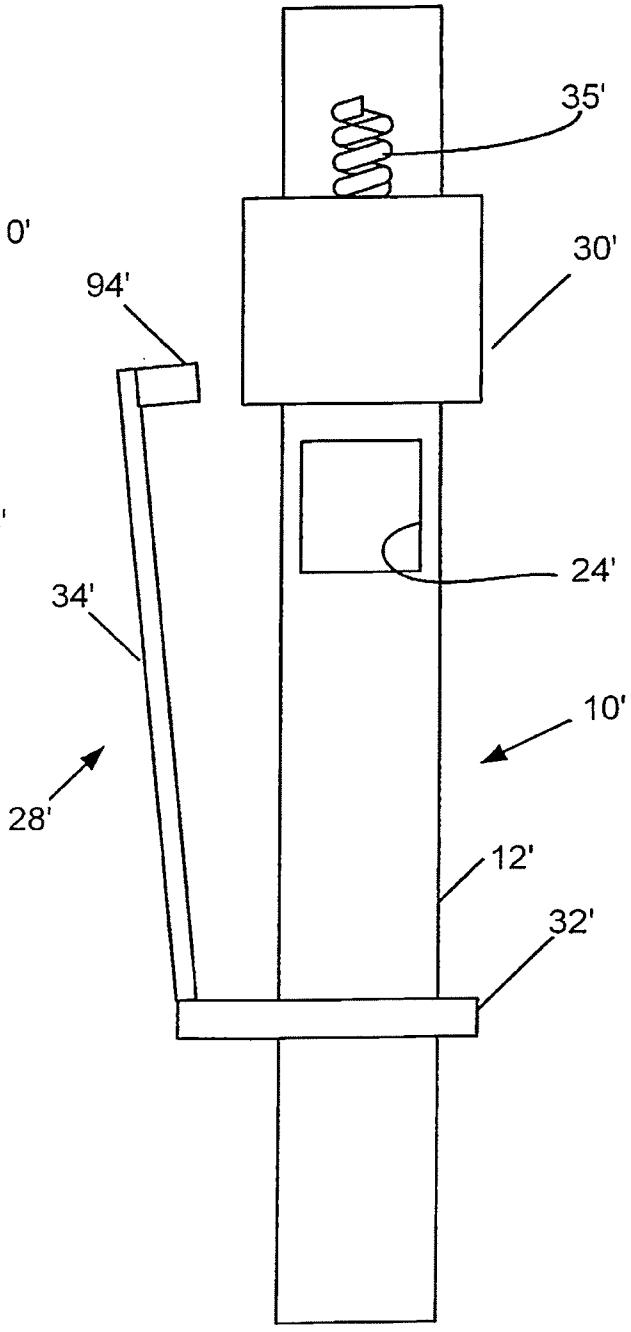


Fig 23

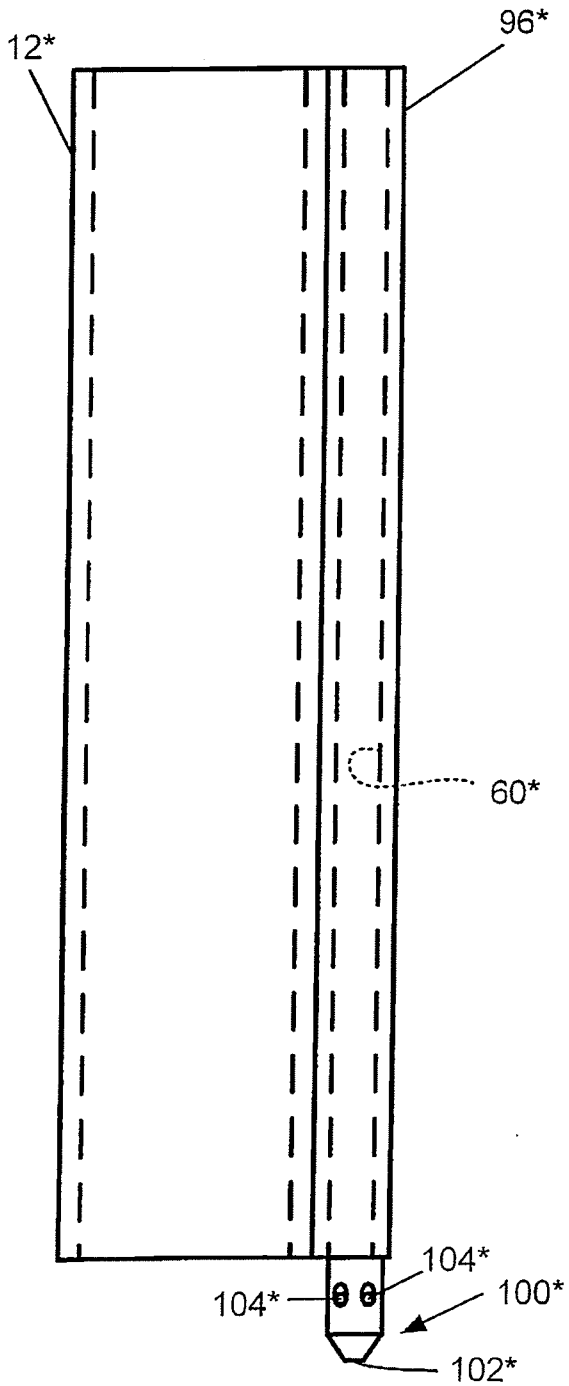


Fig. 24

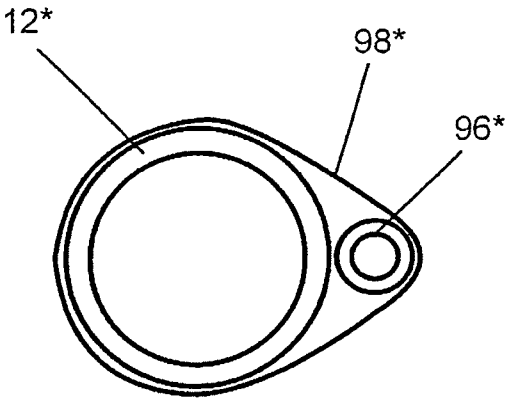


Fig. 25

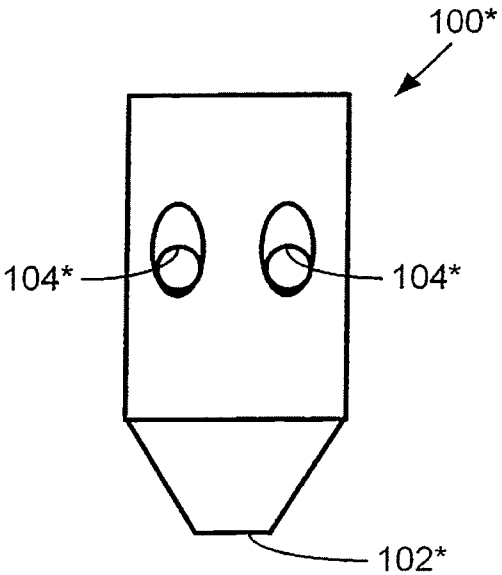


Fig. 26

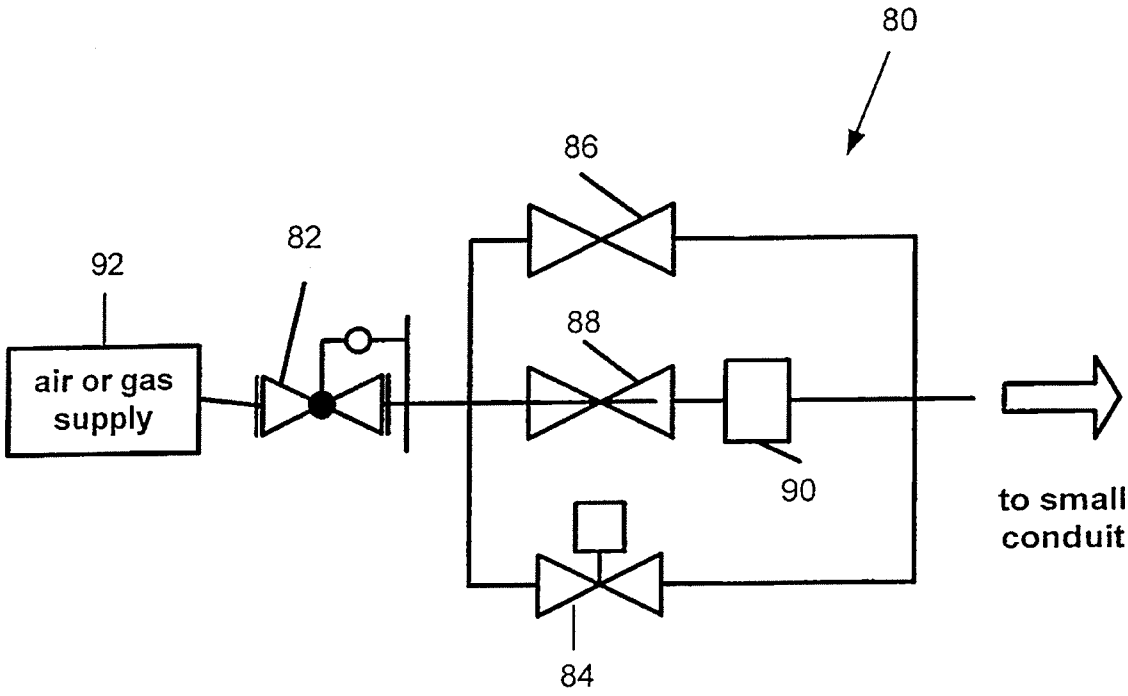


Fig. 27

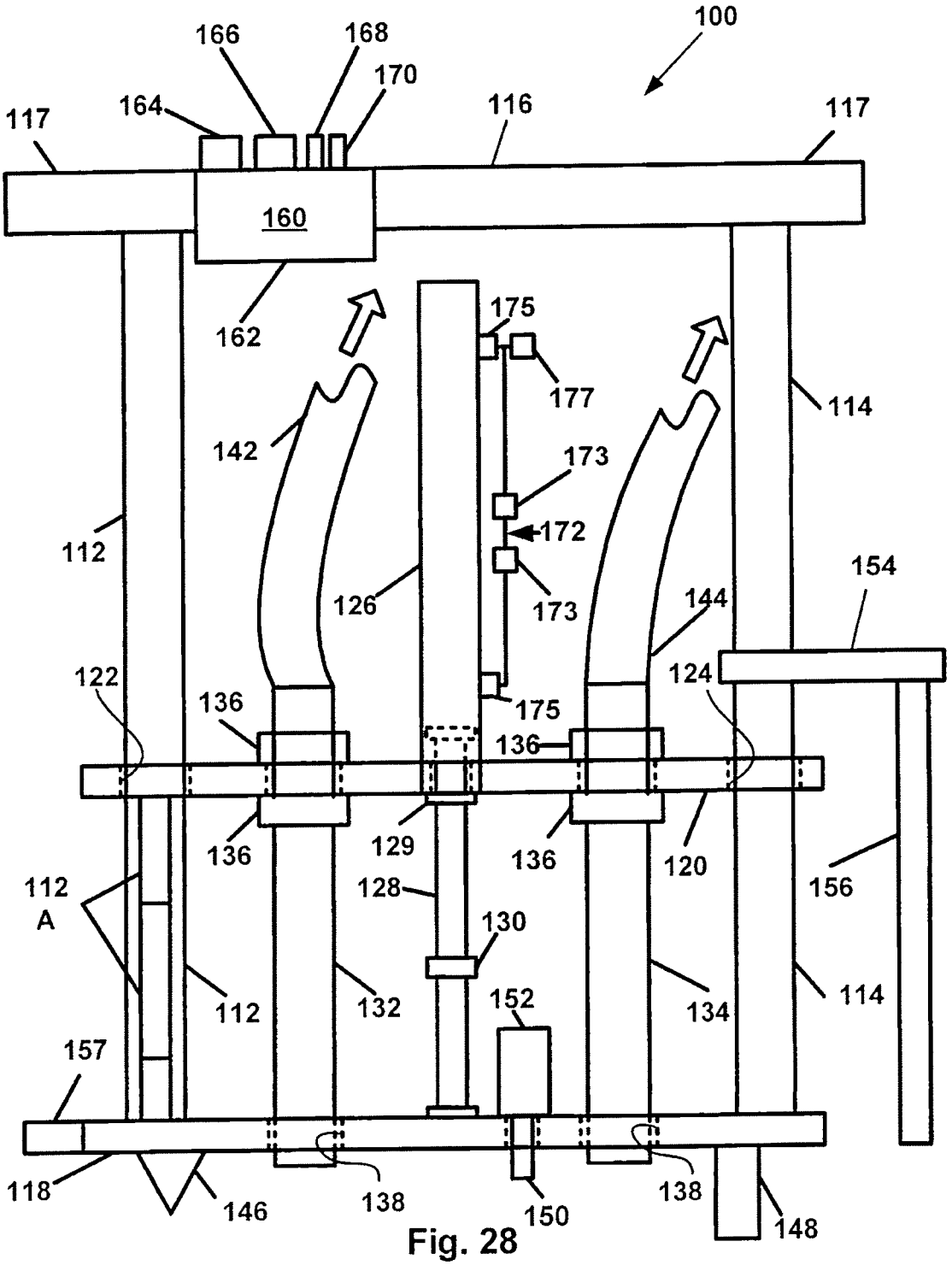

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Fig. 28

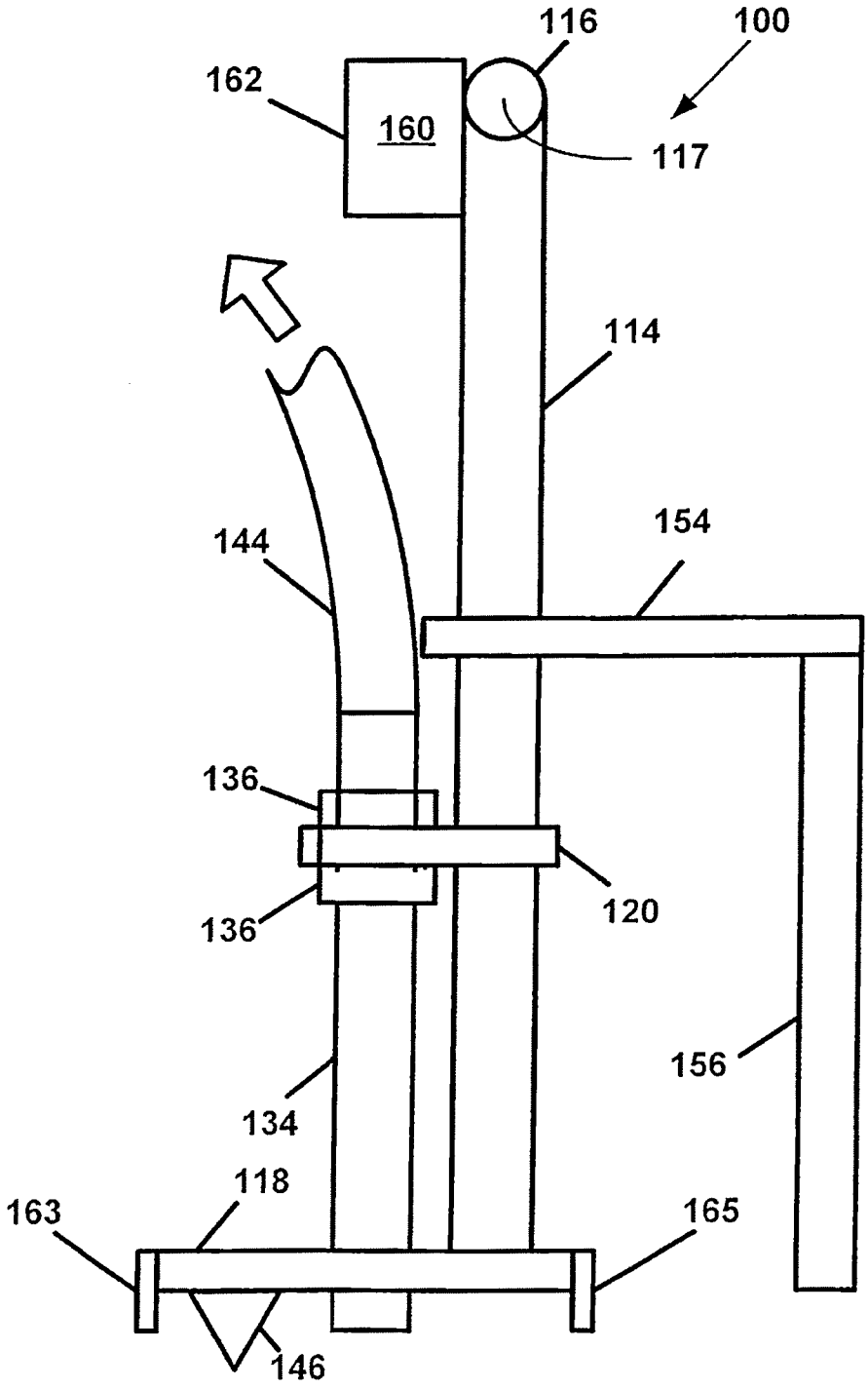

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160
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Fig. 29

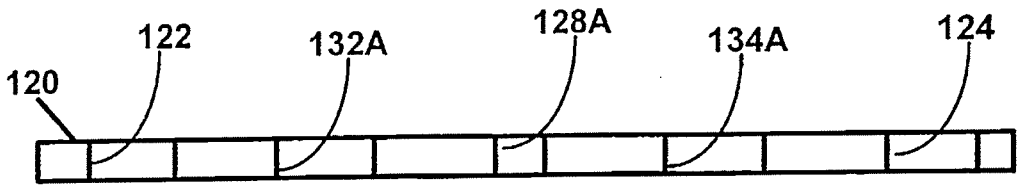


Fig. 30

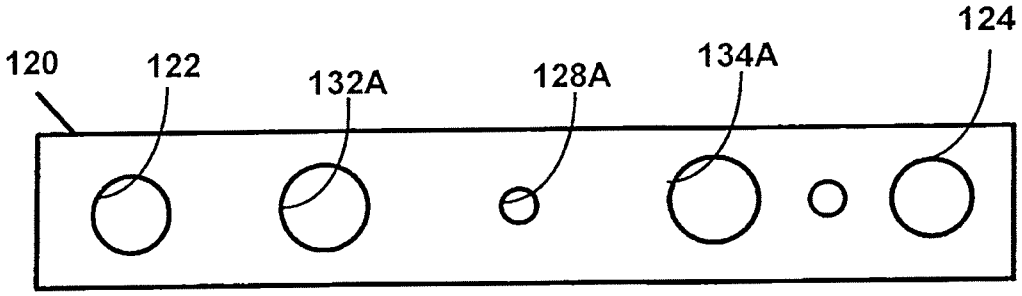


Fig. 31

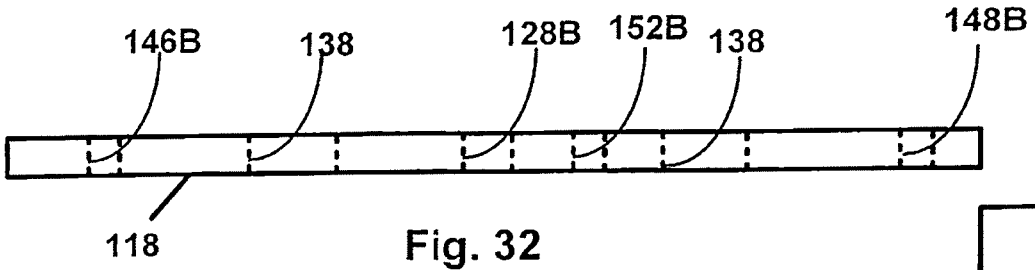


Fig. 32

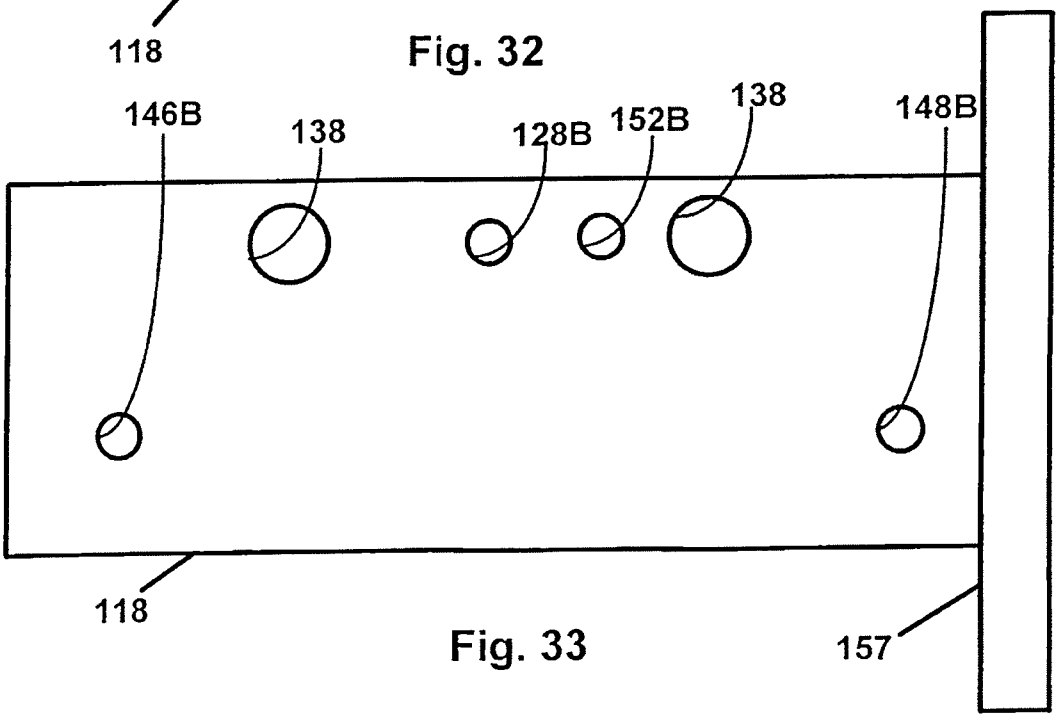


Fig. 33

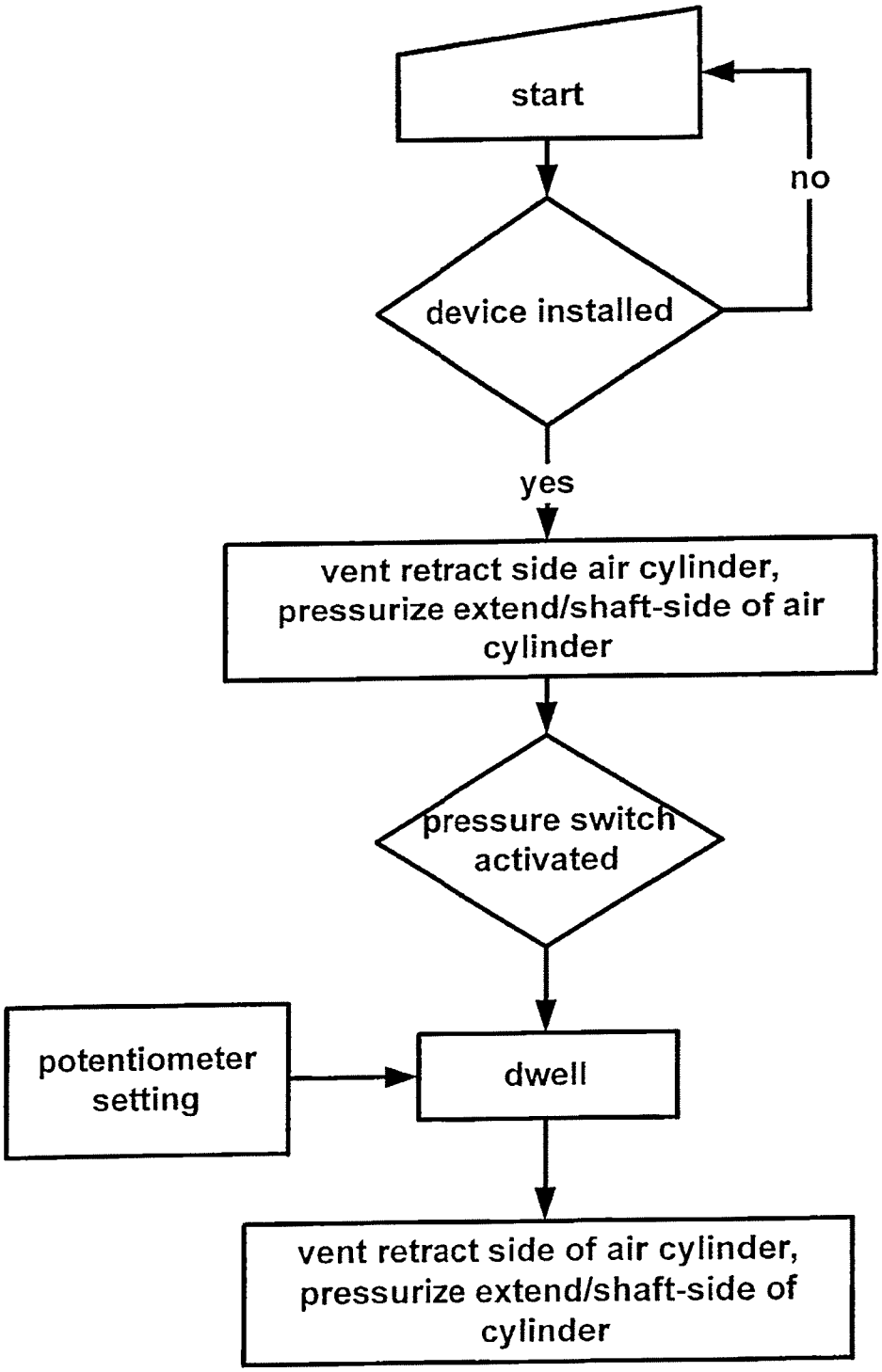

start
no
device installed
yes
vent retract side air cylinder, pressurize extend/shaft-side of air cylinder
pressure switch activated
potentiometer setting
dwell
vent retract side of air cylinder, pressurize extend/shaft-side of cylinder

Fig. 34

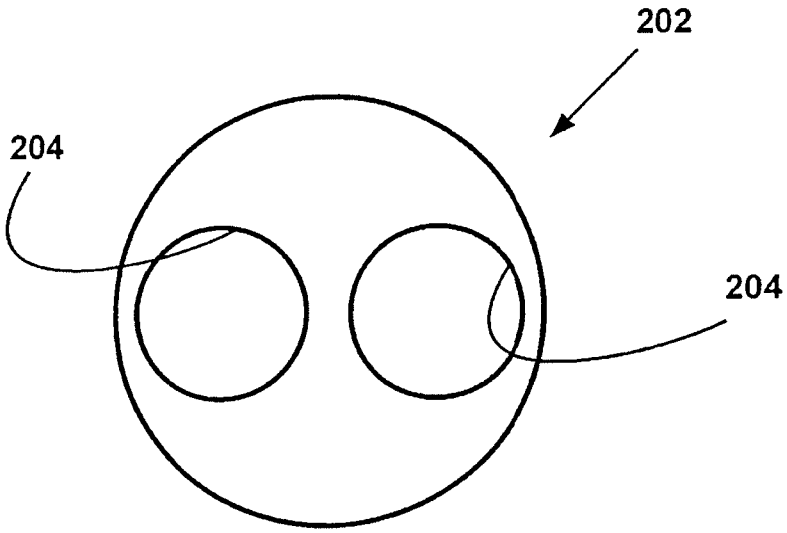


Fig. 35

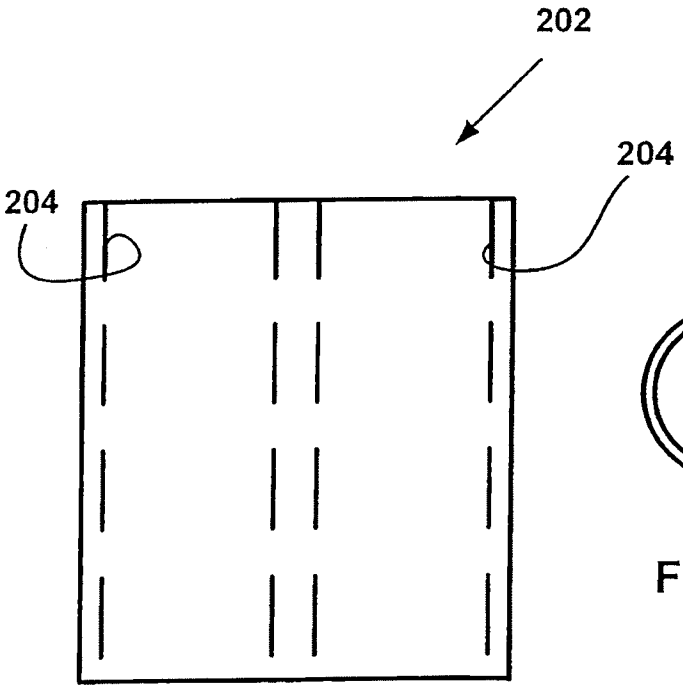


Fig. 36

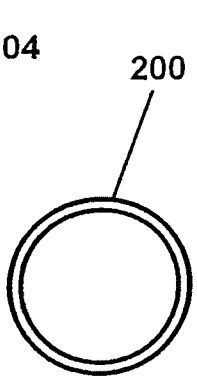


Fig. 37

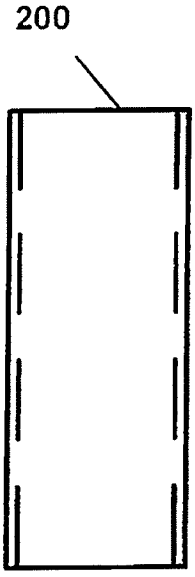


Fig. 38

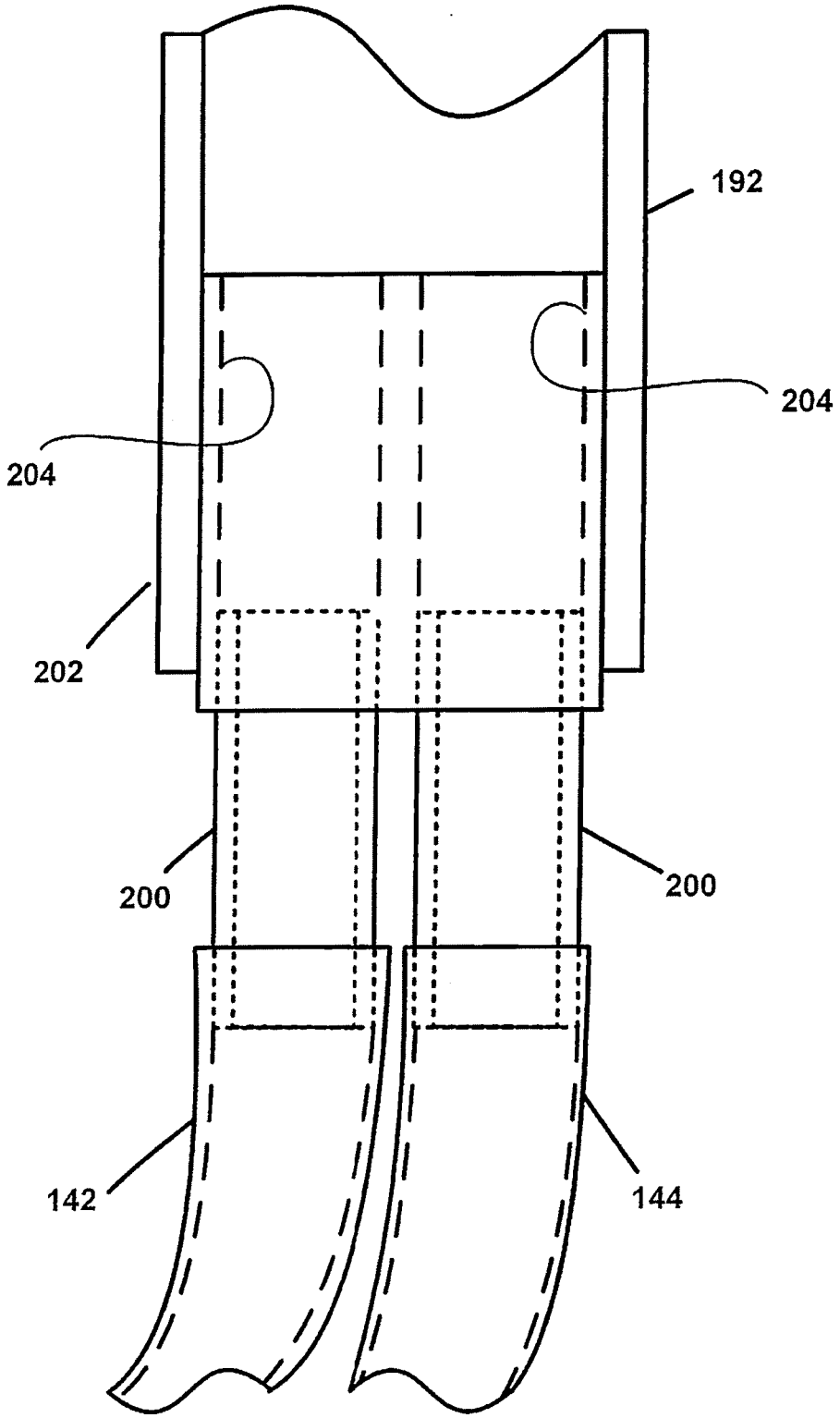


Fig. 39

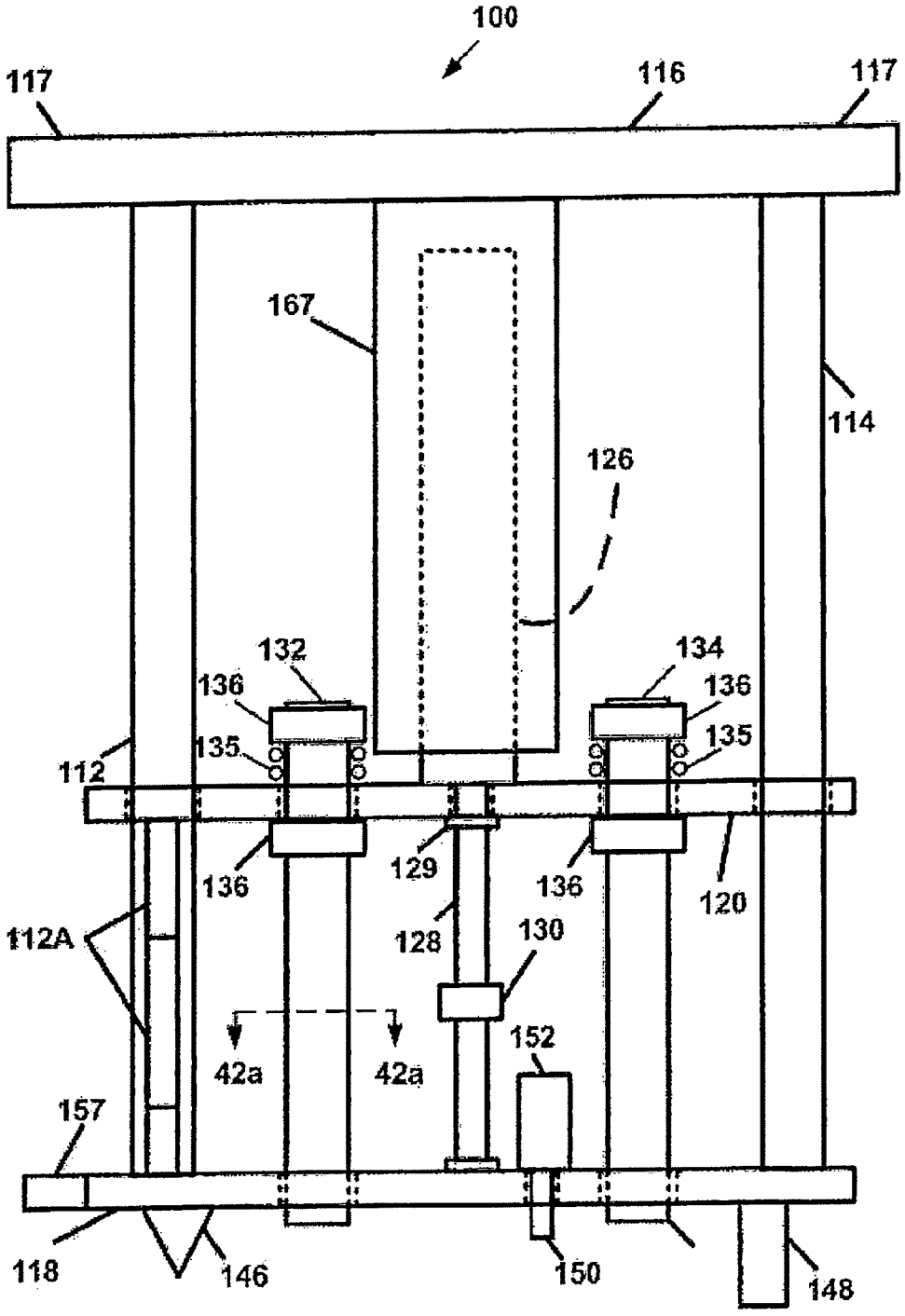

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Fig. 40

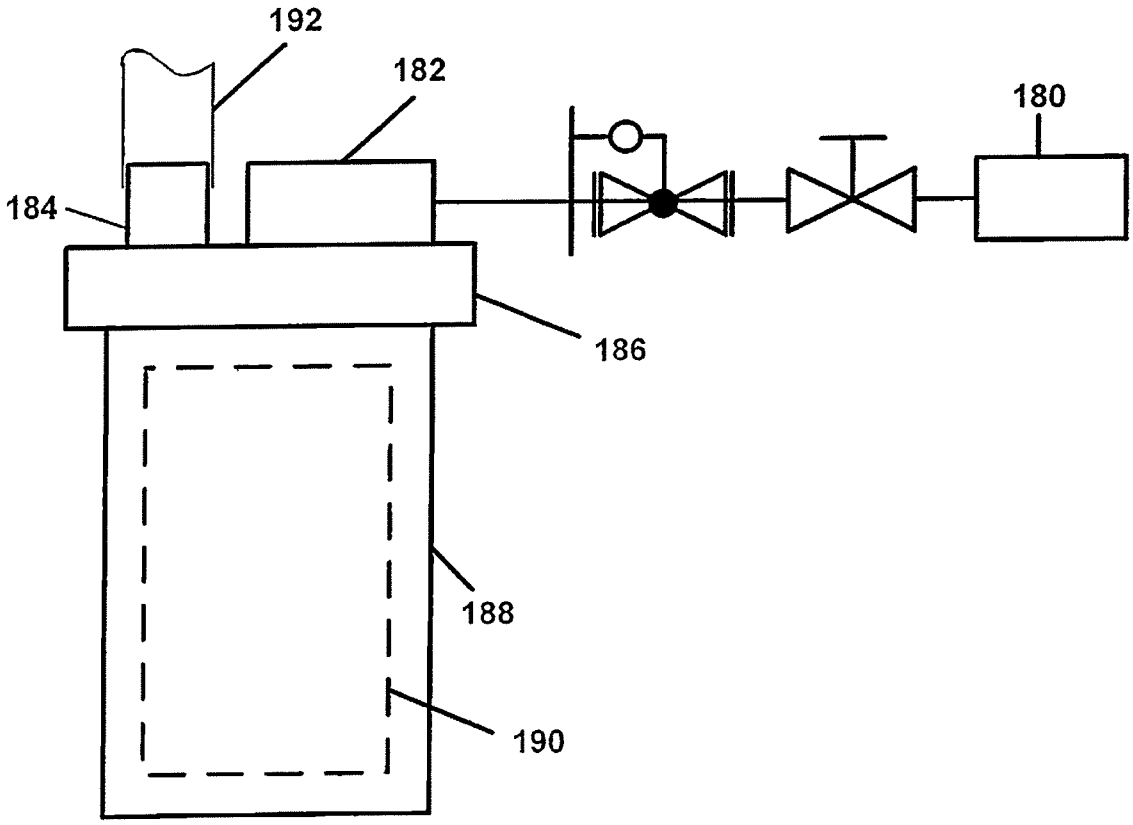


Fig. 41

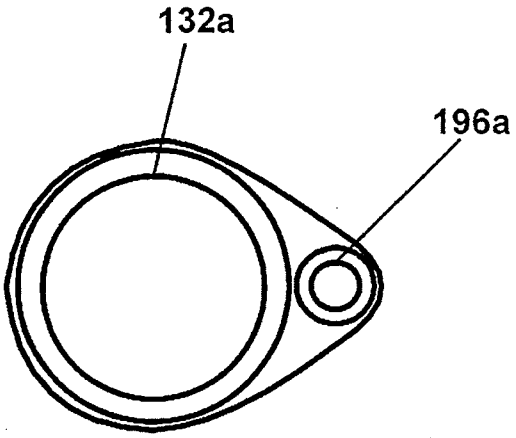


Fig. 42a

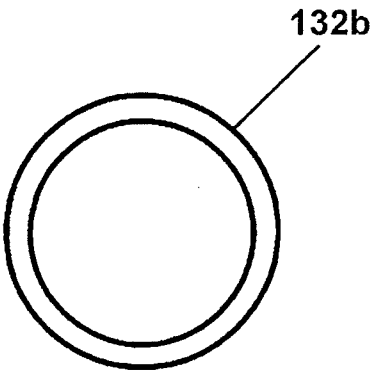


Fig. 42b

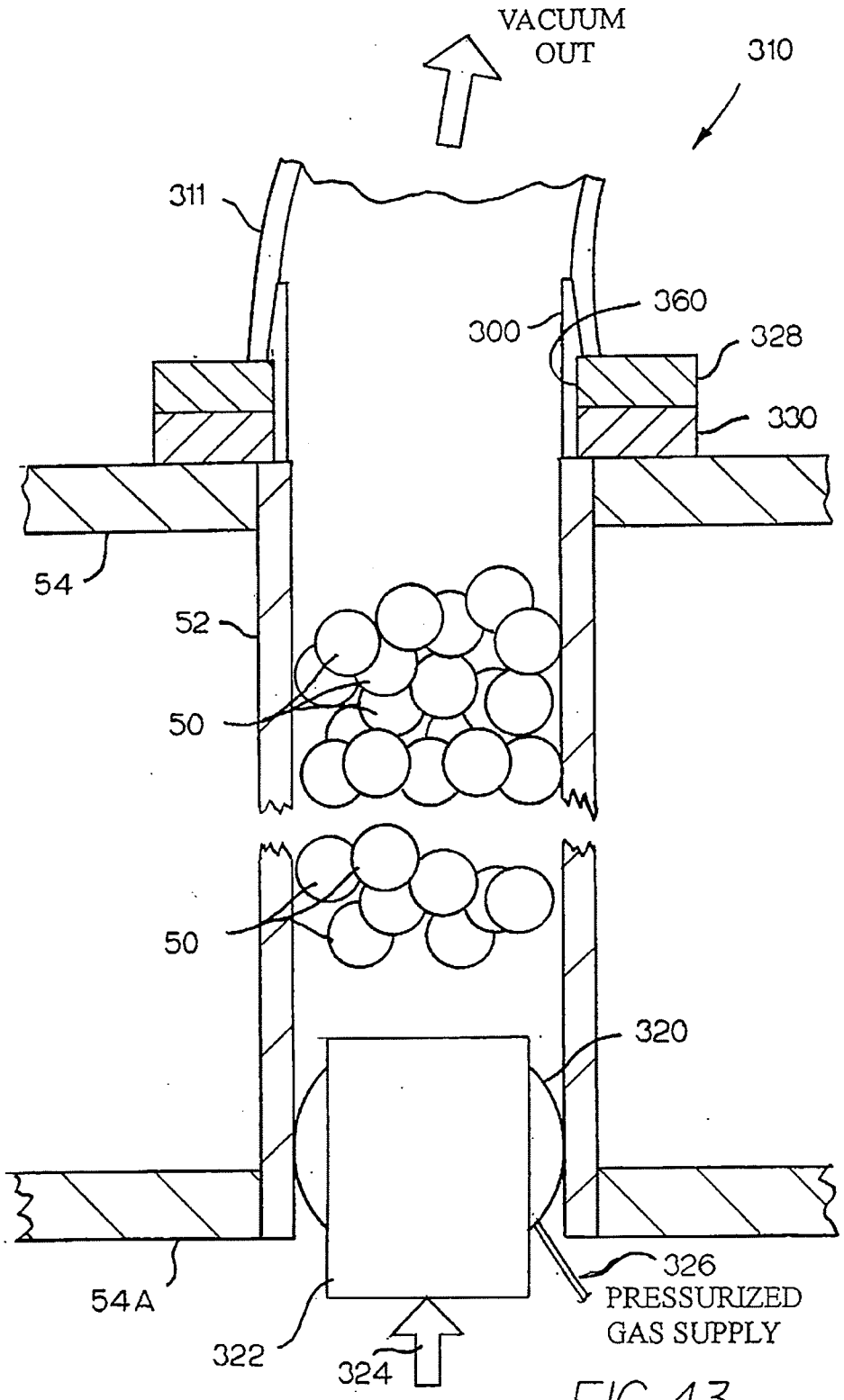

VACUUM
OUT
310
311
360
300
328
330
54
52
50
50
320
54A
322
324
326
PRESSURIZED
GAS SUPPLY

FIG.43

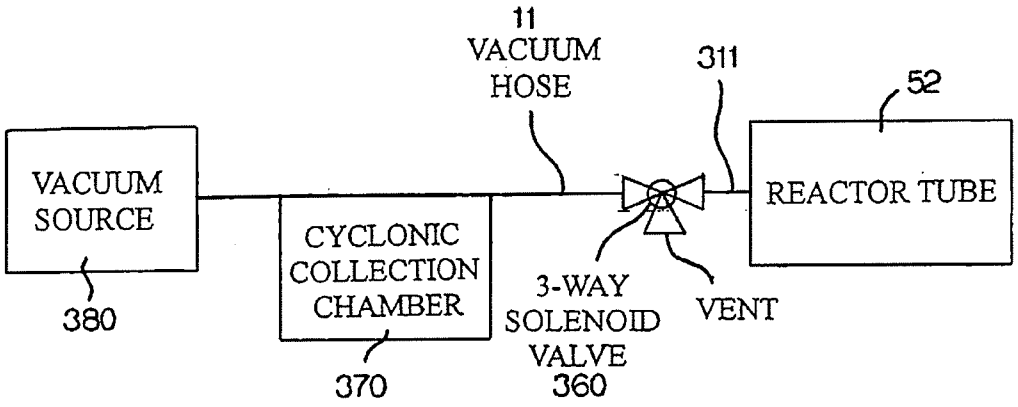

11
VACUUM
HOSE
311
52
VACUUM
SOURCE
CYCLONIC
COLLECTION
CHAMBER
REACTOR TUBE
3-WAY
SOLENOID
VALVE
VENT
380
370
360

FIG. 44

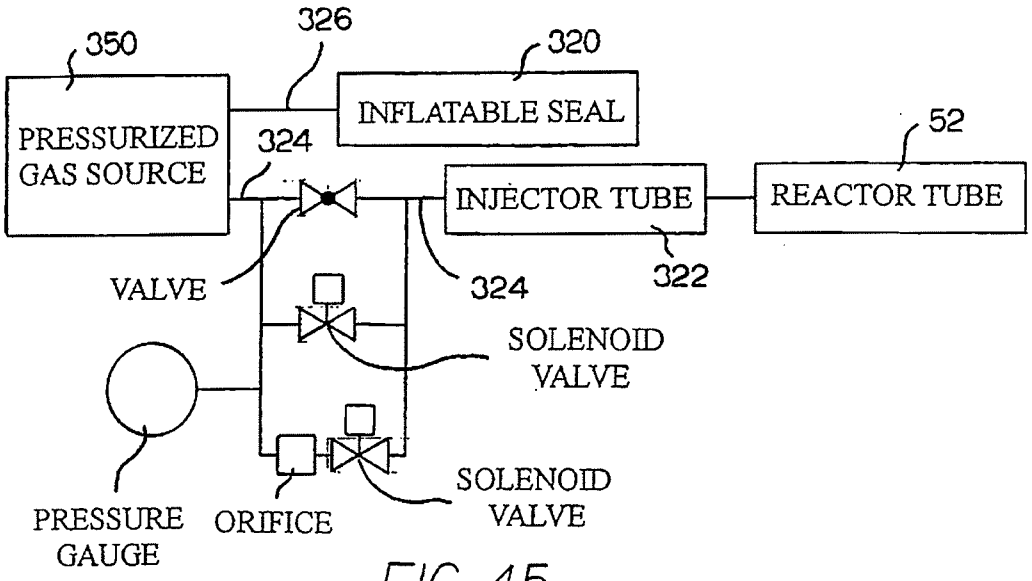

326
350
320
INFLATABLE SEAL
PRESSURIZED
GAS SOURCE
324
52
INJECTOR TUBE
REACTOR TUBE
VALVE
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SOLENOID
VALVE
PRESSURE
GAUGE
ORIFICE
SOLENOID
VALVE

FIG. 45

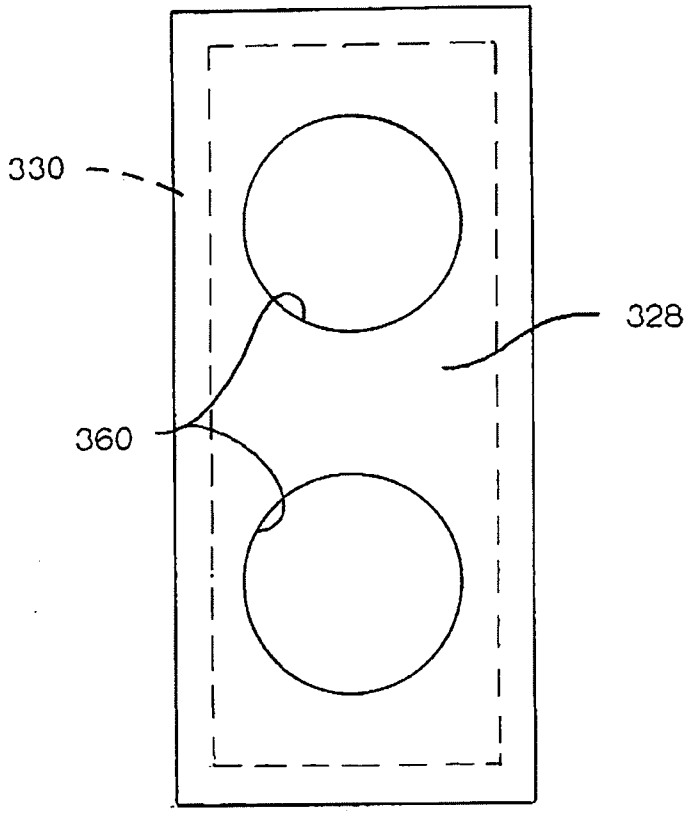


FIG. 46