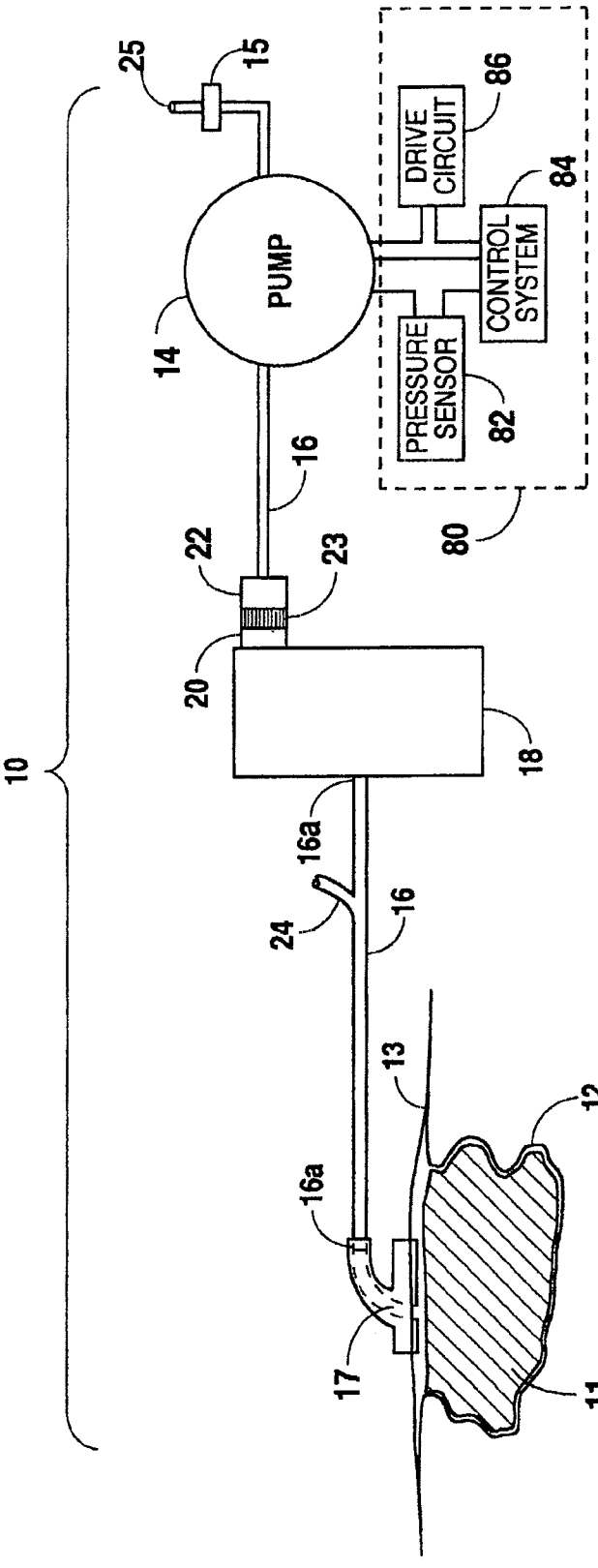

10
11
12
13
14
15
16
16a
17
18
20
22
23
24
25
80
82
84
86
PUMP
DRIVE CIRCUIT
CONTROL SYSTEM
PRESSURE SENSOR

Fig. 1

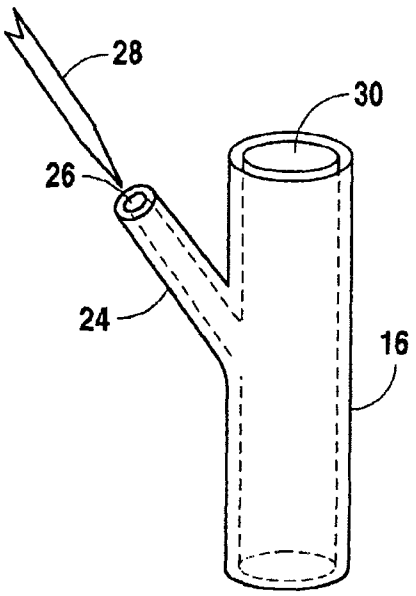


Fig. 2a

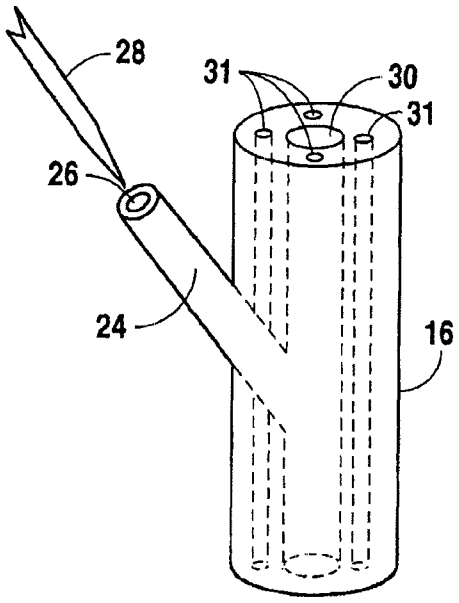


Fig. 2b

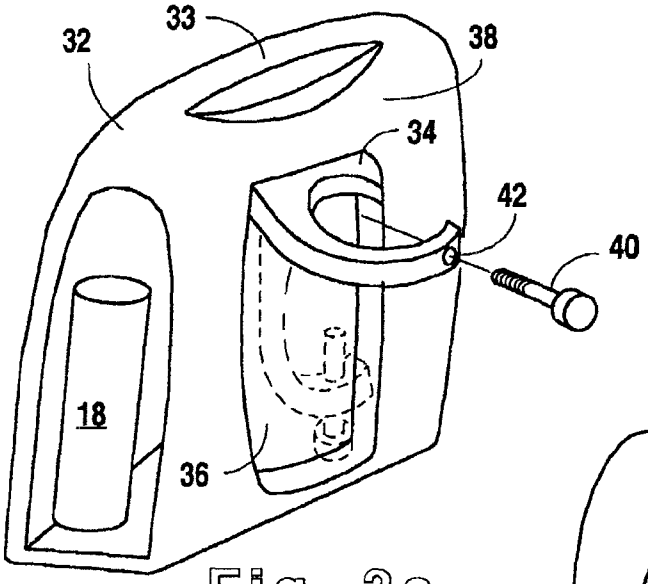


Fig. 3a

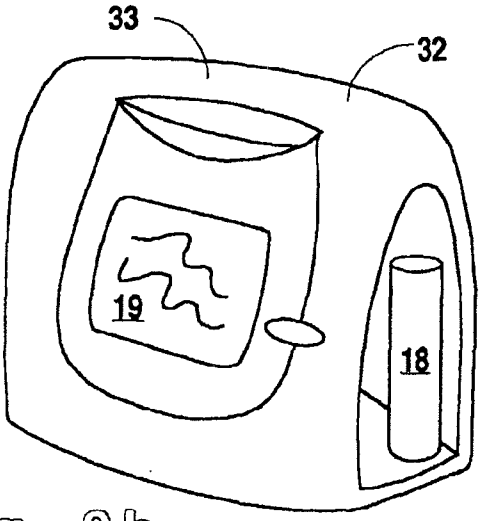


Fig. 3b

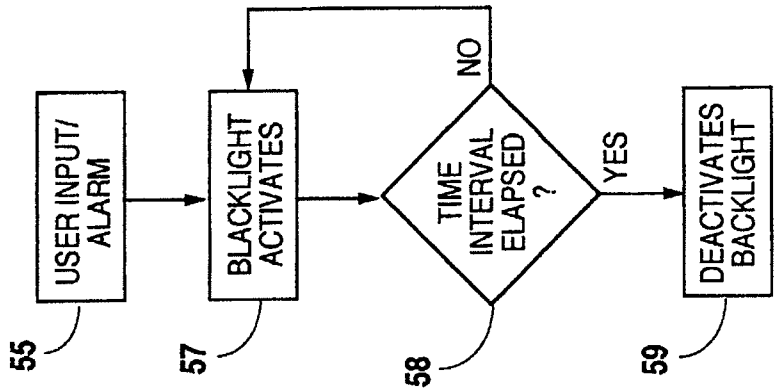

USER INPUT/ ALARM
55
BLACKLIGHT ACTIVATES
57
TIME INTERVAL ELAPSED ?
58
NO
YES
DEACTIVATES BACKLIGHT
59

Fig. 4b

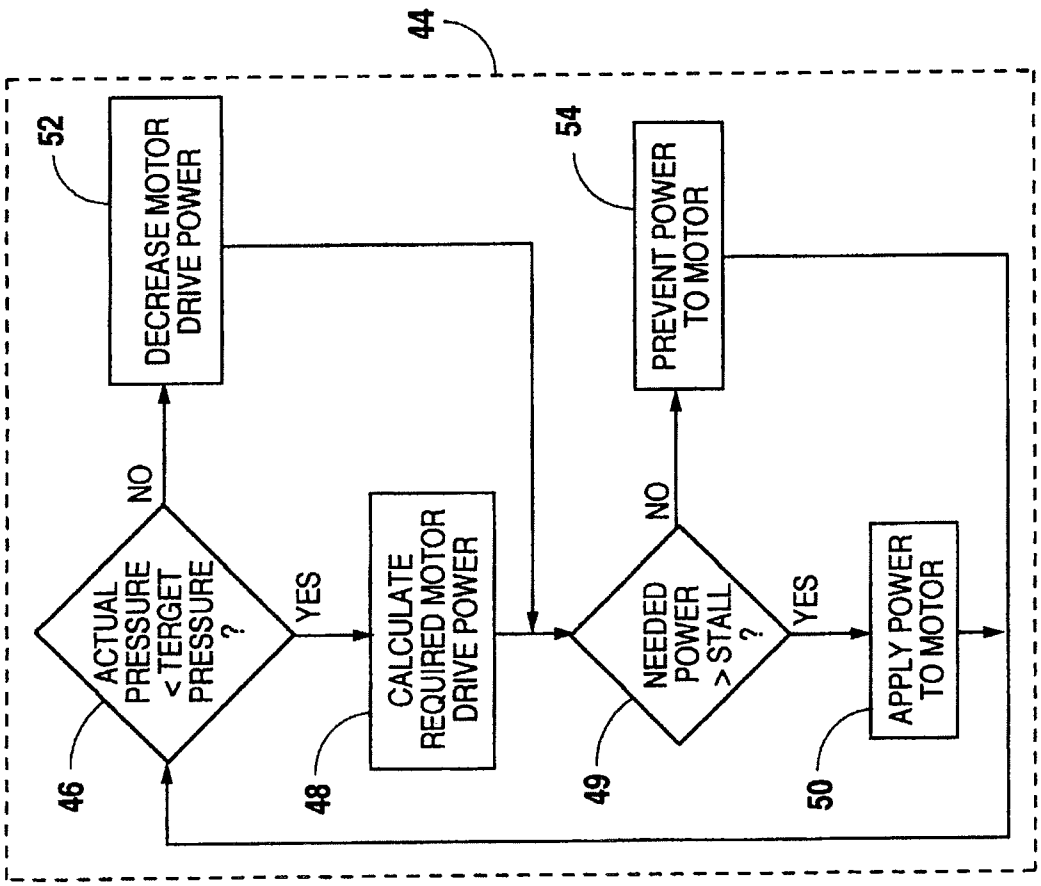

44
52
DECREASE MOTOR DRIVE POWER
54
PREVENT POWER TO MOTOR
ACTUAL PRESSURE < TERGET PRESSURE ?
46
NO
YES
CALCULATE REQUIRED MOTOR DRIVE POWER
48
NEEDED POWER > STALL ?
49
NO
YES
APPLY POWER TO MOTOR
50

Fig. 4a

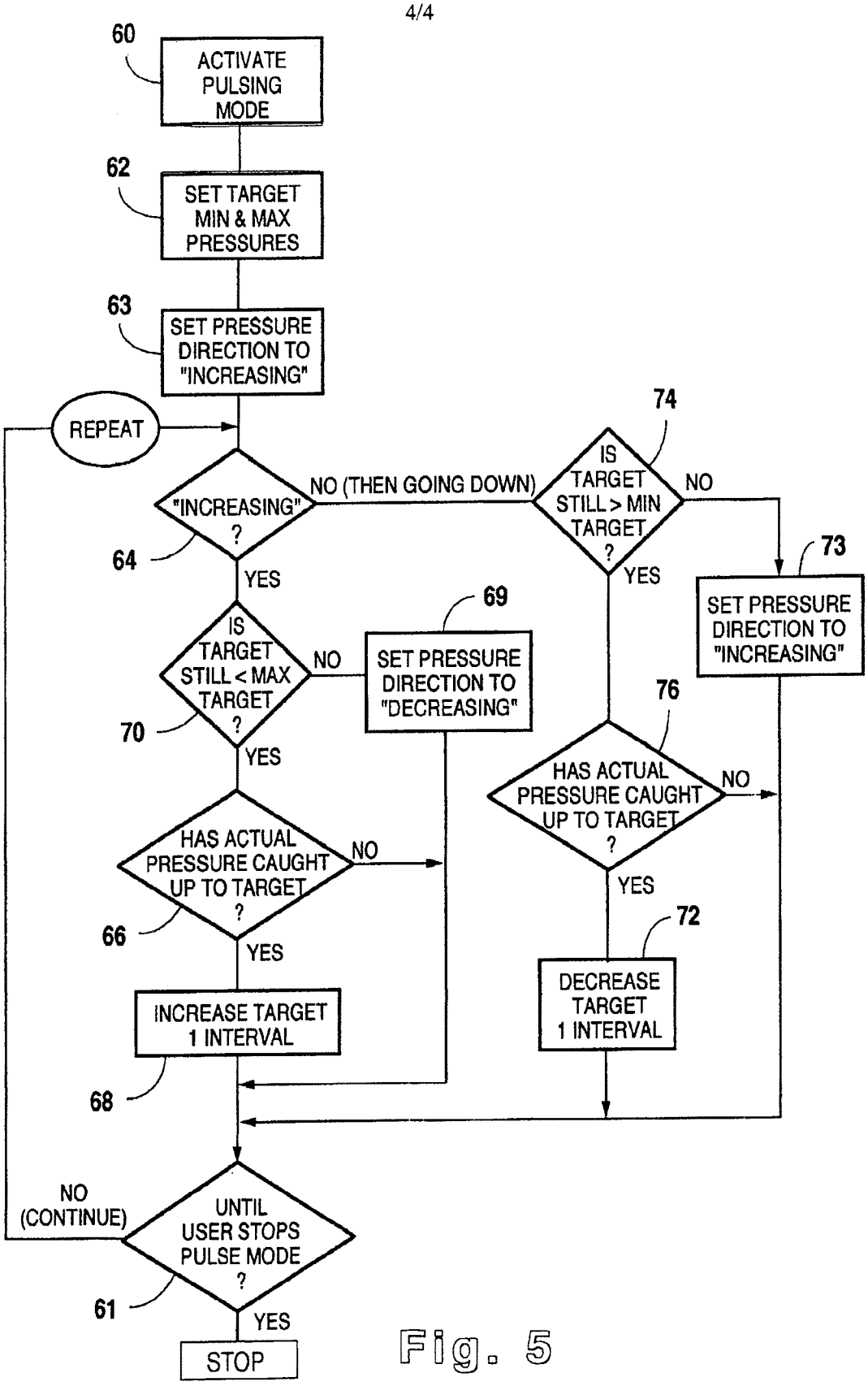

60
ACTIVATE PULSING MODE
62
SET TARGET MIN & MAX PRESSURES
63
SET PRESSURE DIRECTION TO "INCREASING"
REPEAT
"INCREASING" ?
64
NO (THEN GOING DOWN)
YES
IS TARGET STILL < MAX TARGET ?
70
NO
69
SET PRESSURE DIRECTION TO "DECREASING"
YES
HAS ACTUAL PRESSURE CAUGHT UP TO TARGET ?
66
NO
YES
INCREASE TARGET 1 INTERVAL
68
74
IS TARGET STILL > MIN TARGET ?
NO
YES
73
SET PRESSURE DIRECTION TO "INCREASING"
76
HAS ACTUAL PRESSURE CAUGHT UP TO TARGET ?
NO
YES
72
DECREASE TARGET 1 INTERVAL
NO (CONTINUE)
UNTIL USER STOPS PULSE MODE ?
61
YES
STOP

Fig. 5