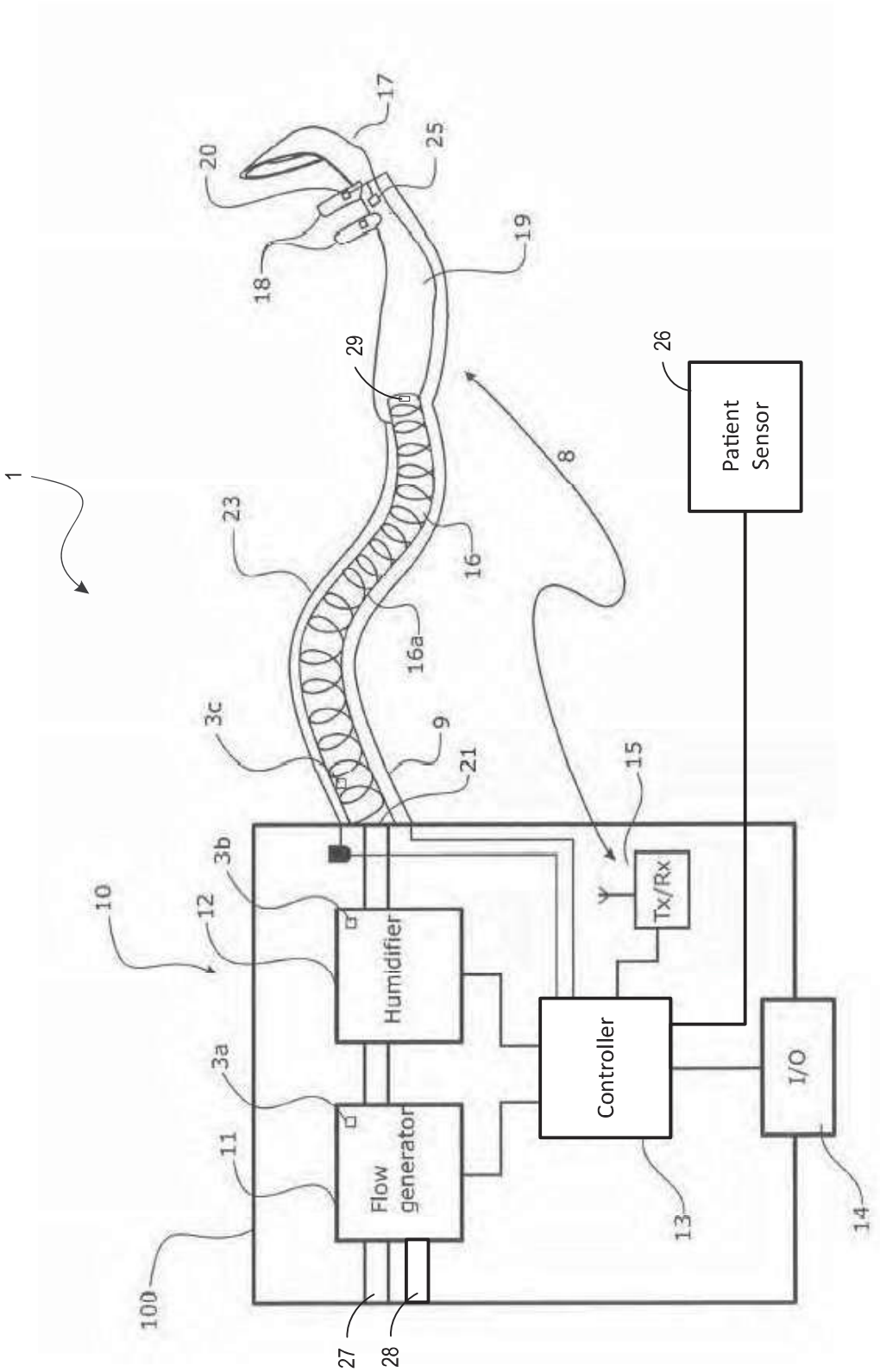

1
17
25
20
19
18
29
26
Patient Sensor
8
23
16
16a
3c
9
21
15
3b
10
12
Humidifier
Tx/Rx
3a
Controller
I/O
11
Flow generator
13
14
100
27
28

Figure 1

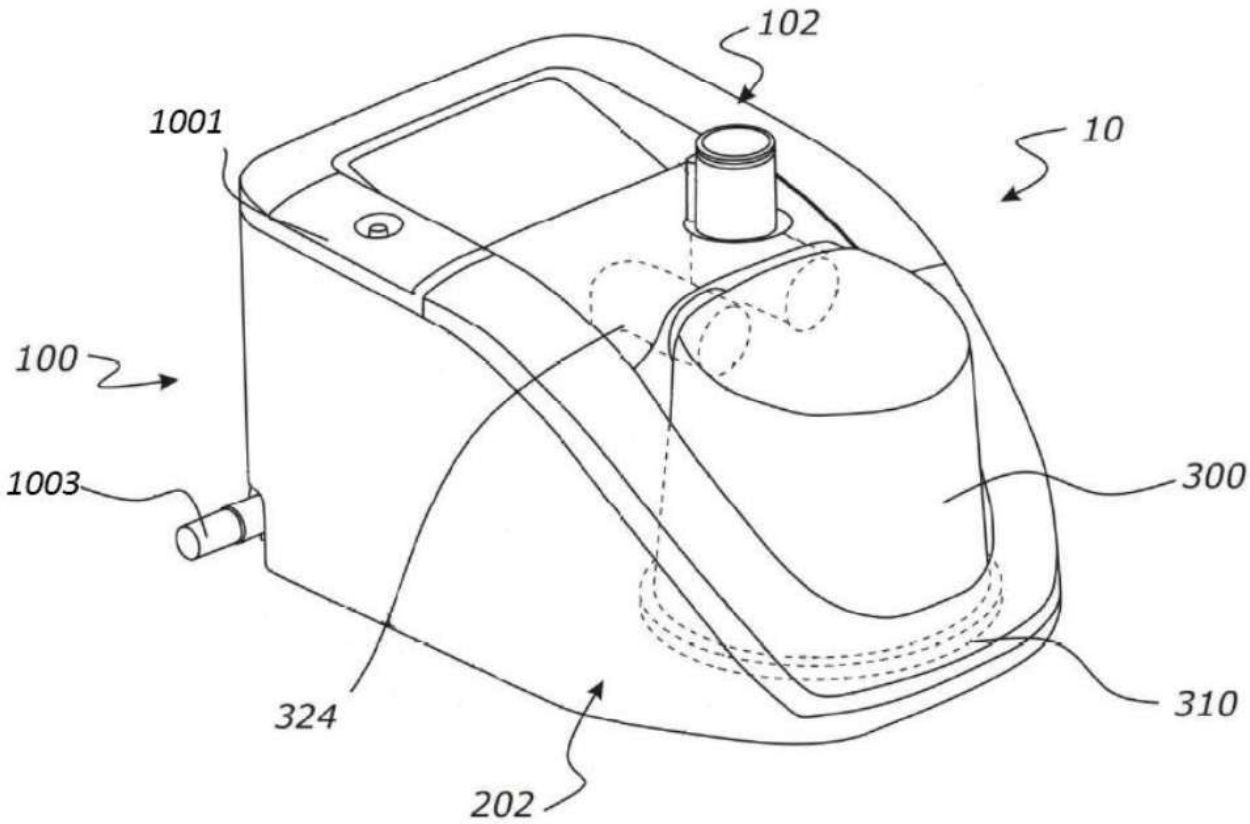


Figure 2

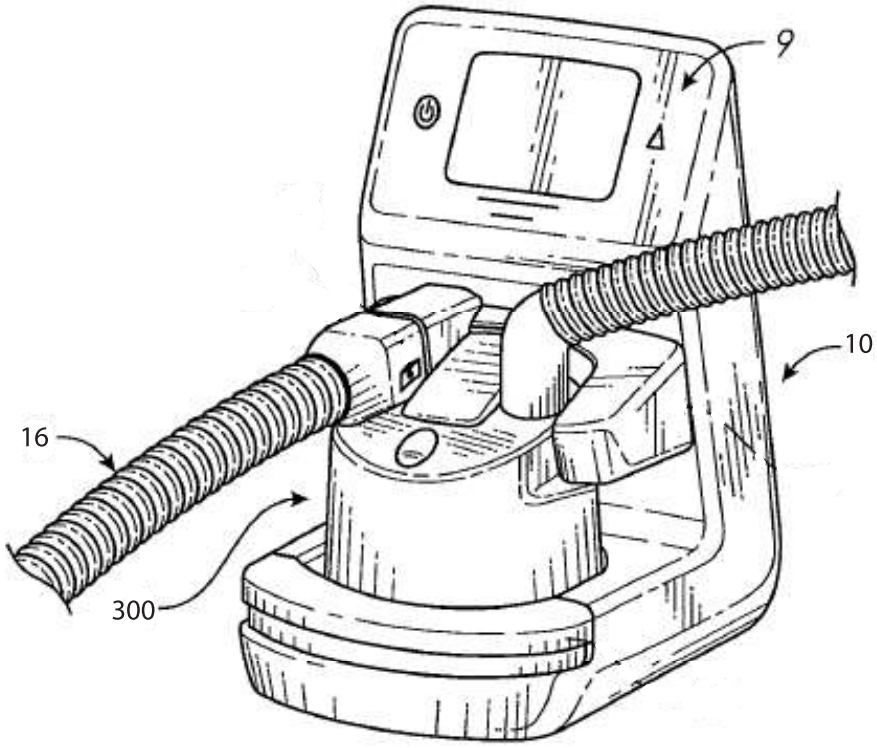


Figure 2A

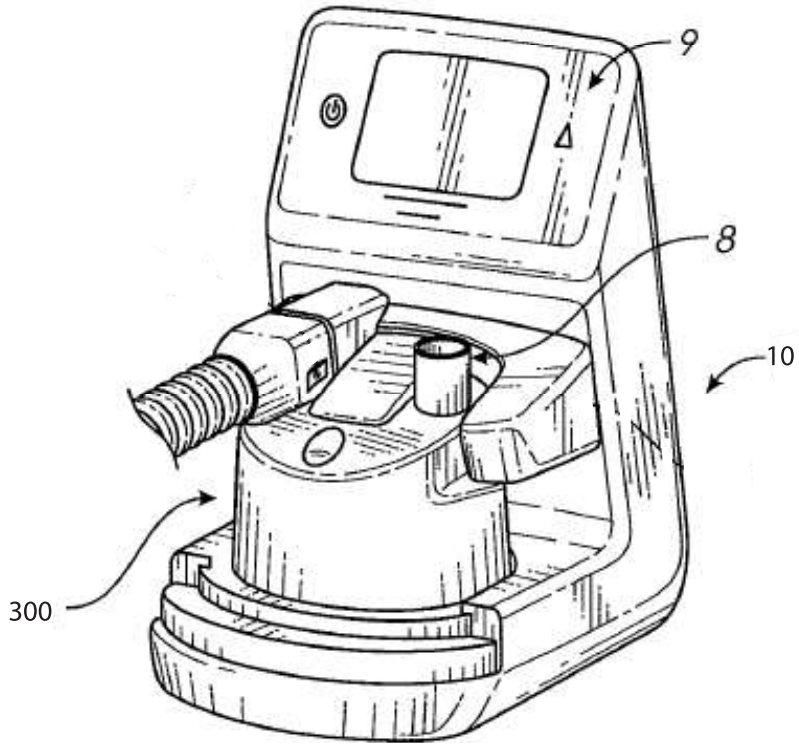


Figure 2B

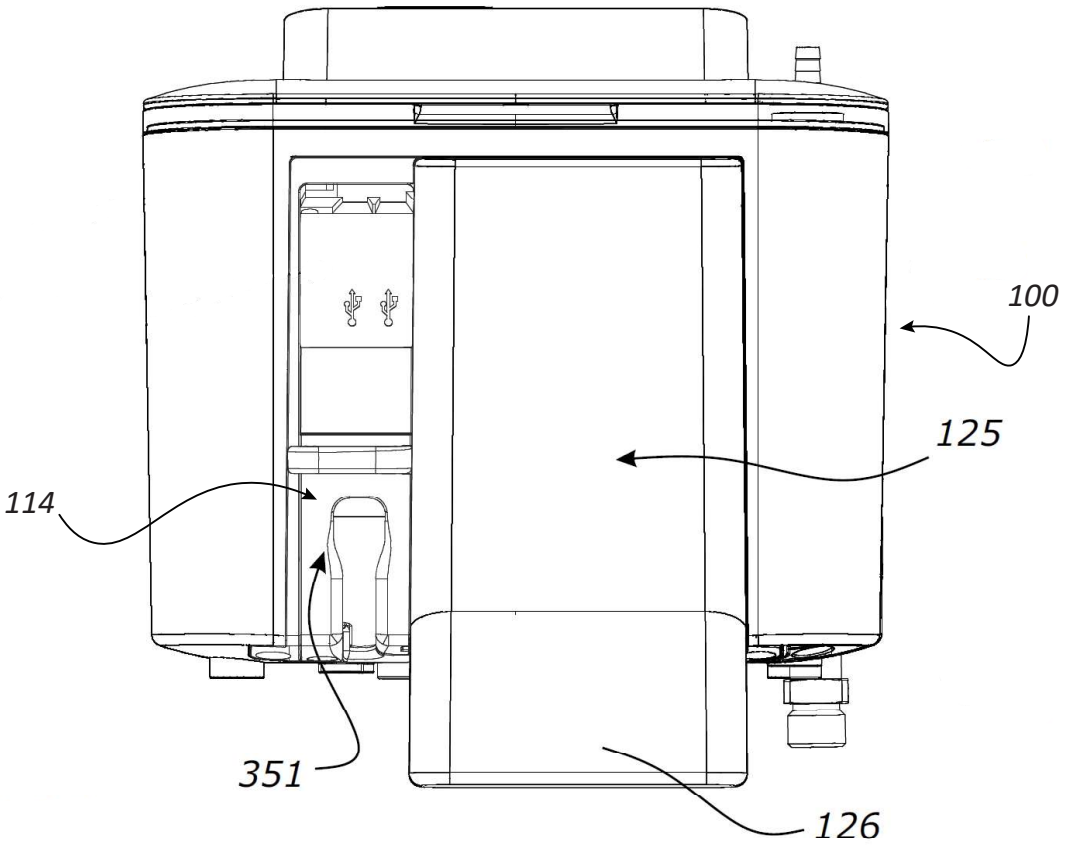


Figure 3

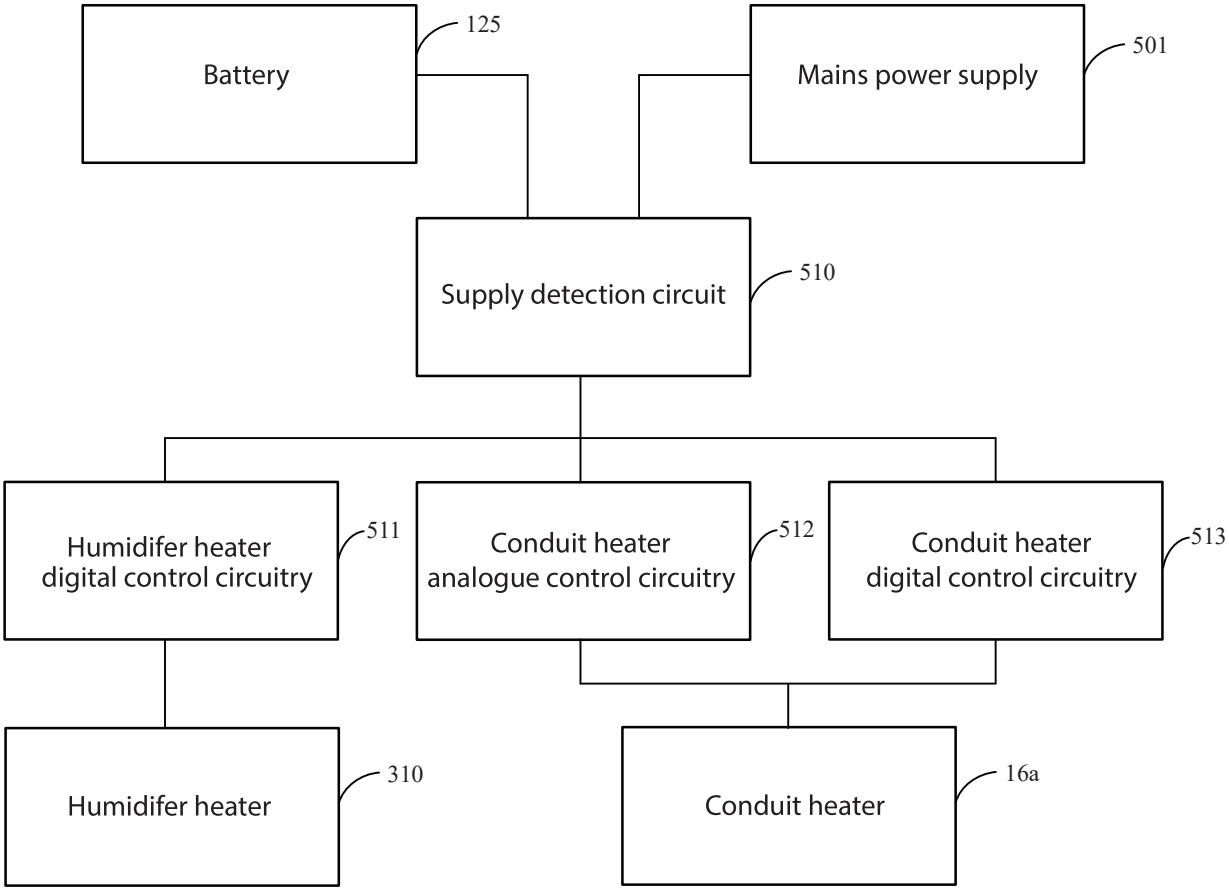

Battery
125
Mains power supply
501
Supply detection circuit
510
Humidifer heater digital control circuitry
511
Conduit heater analogue control circuitry
512
Conduit heater digital control circuitry
513
Humidifer heater
310
Conduit heater
16a

Figure 4

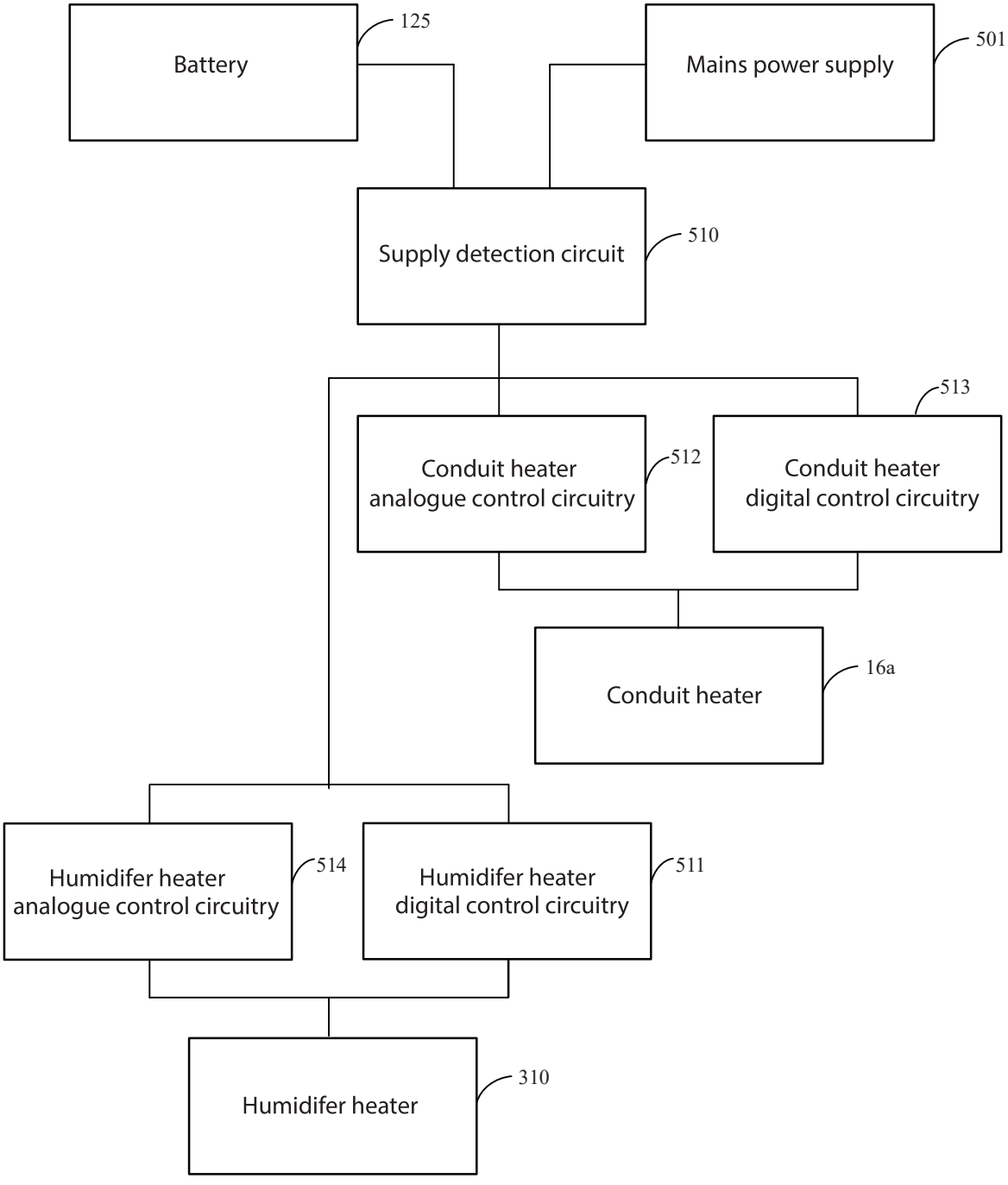

Battery
125
Mains power supply
501
Supply detection circuit
510
513
Conduit heater analogue control circuitry
512
Conduit heater digital control circuitry
Conduit heater
16a
Humidifer heater analogue control circuitry
514
Humidifer heater digital control circuitry
511
Humidifer heater
310

Figure 4A

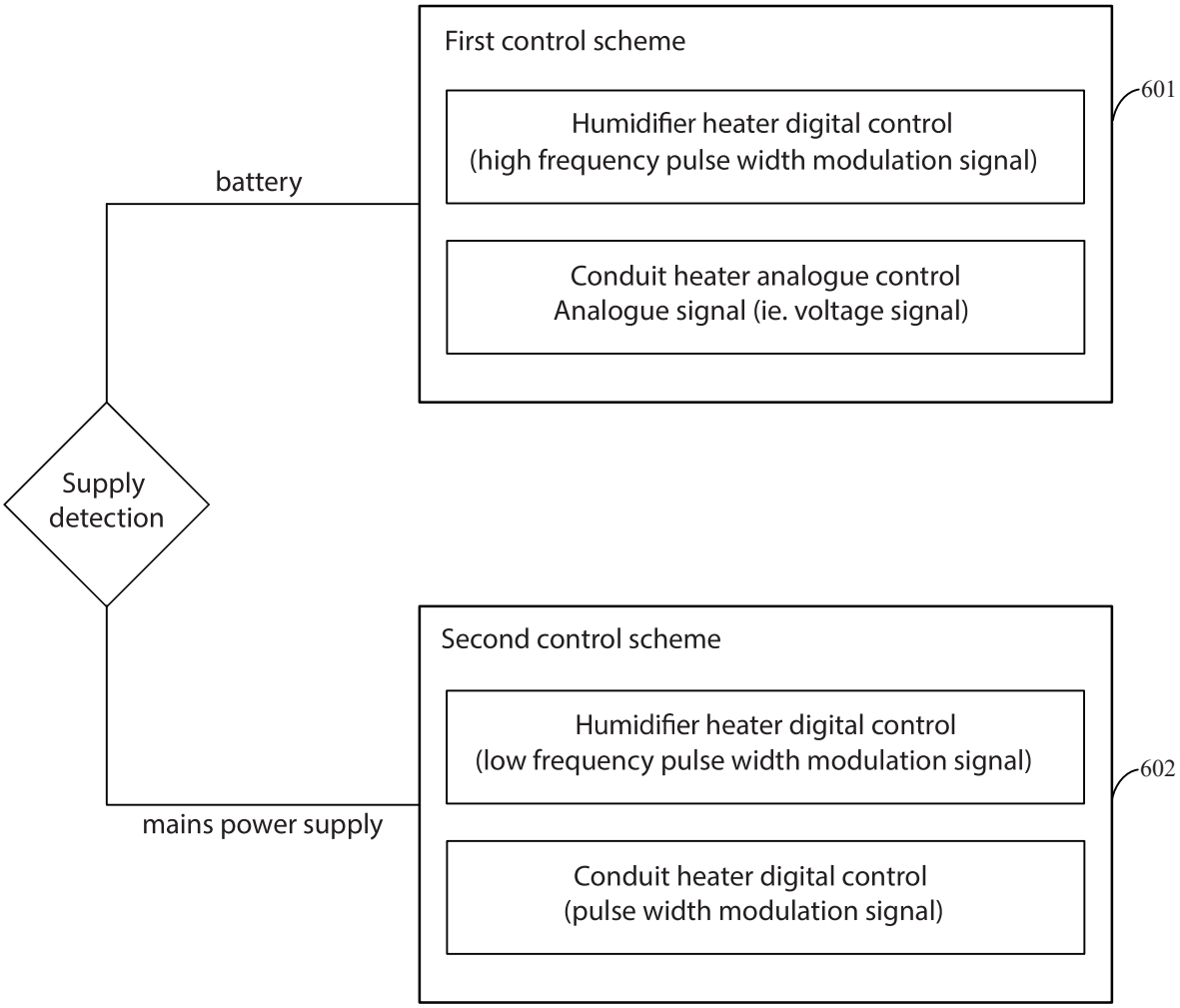

First control scheme
Humidifier heater digital control
(high frequency pulse width modulation signal)
Conduit heater analogue control
Analogue signal (ie. voltage signal)
601
battery
Supply
detection
Second control scheme
Humidifier heater digital control
(low frequency pulse width modulation signal)
Conduit heater digital control
(pulse width modulation signal)
602
mains power supply

Figure 5

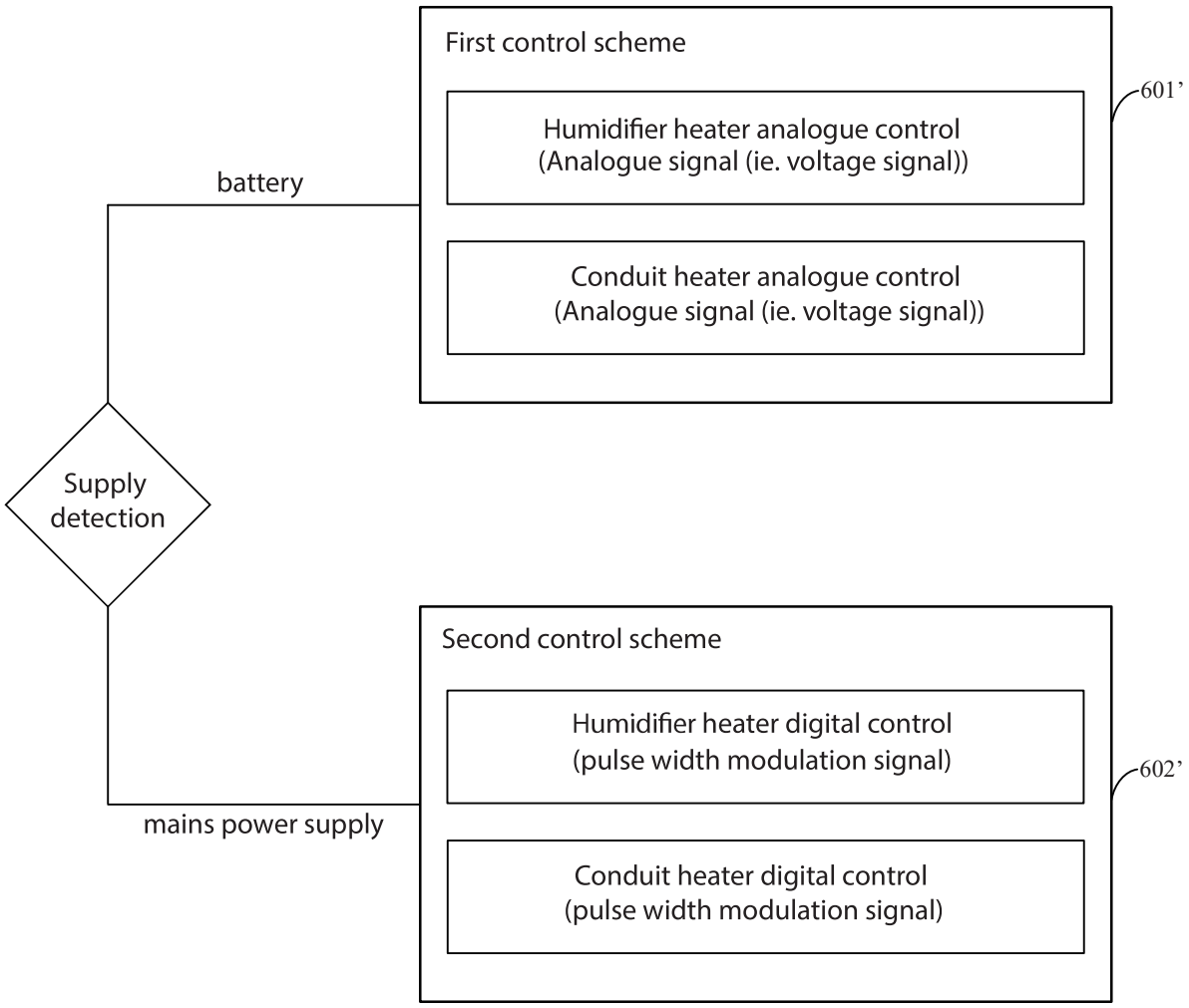

First control scheme
Humidifier heater analogue control
(Analogue signal (ie. voltage signal))
Conduit heater analogue control
(Analogue signal (ie. voltage signal))
601'
battery
Supply
detection
Second control scheme
Humidifier heater digital control
(pulse width modulation signal)
Conduit heater digital control
(pulse width modulation signal)
602'
mains power supply

Figure 5A

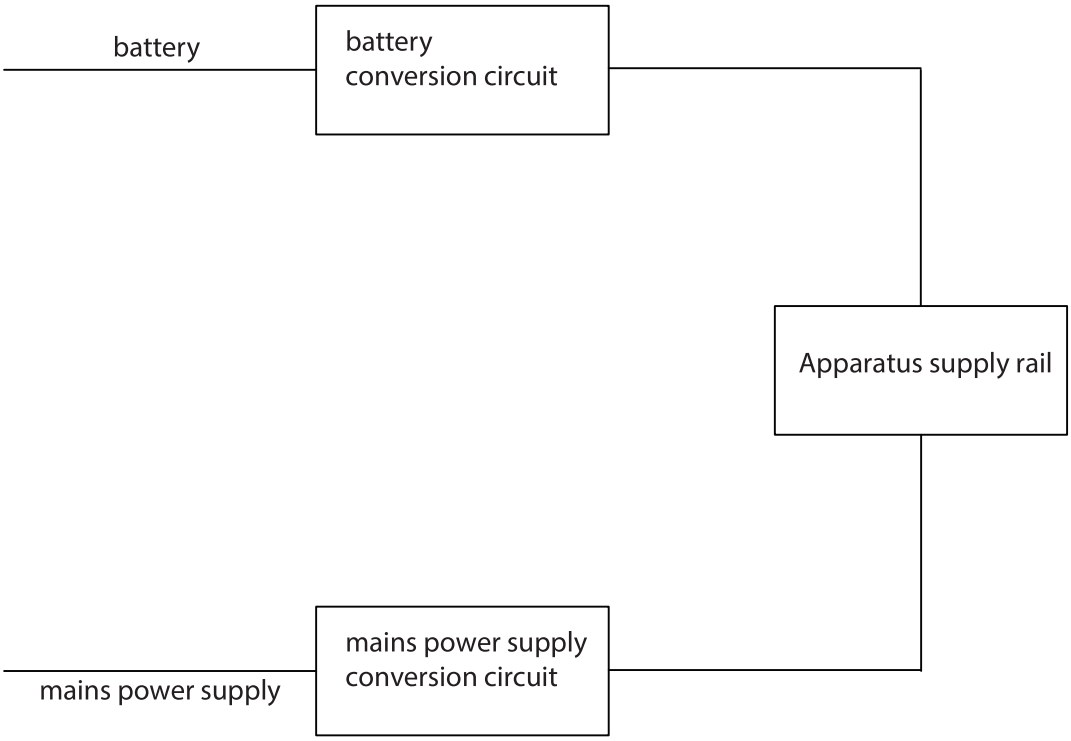

battery
battery
conversion circuit
Apparatus supply rail
mains power supply
mains power supply
conversion circuit

Figure 5B

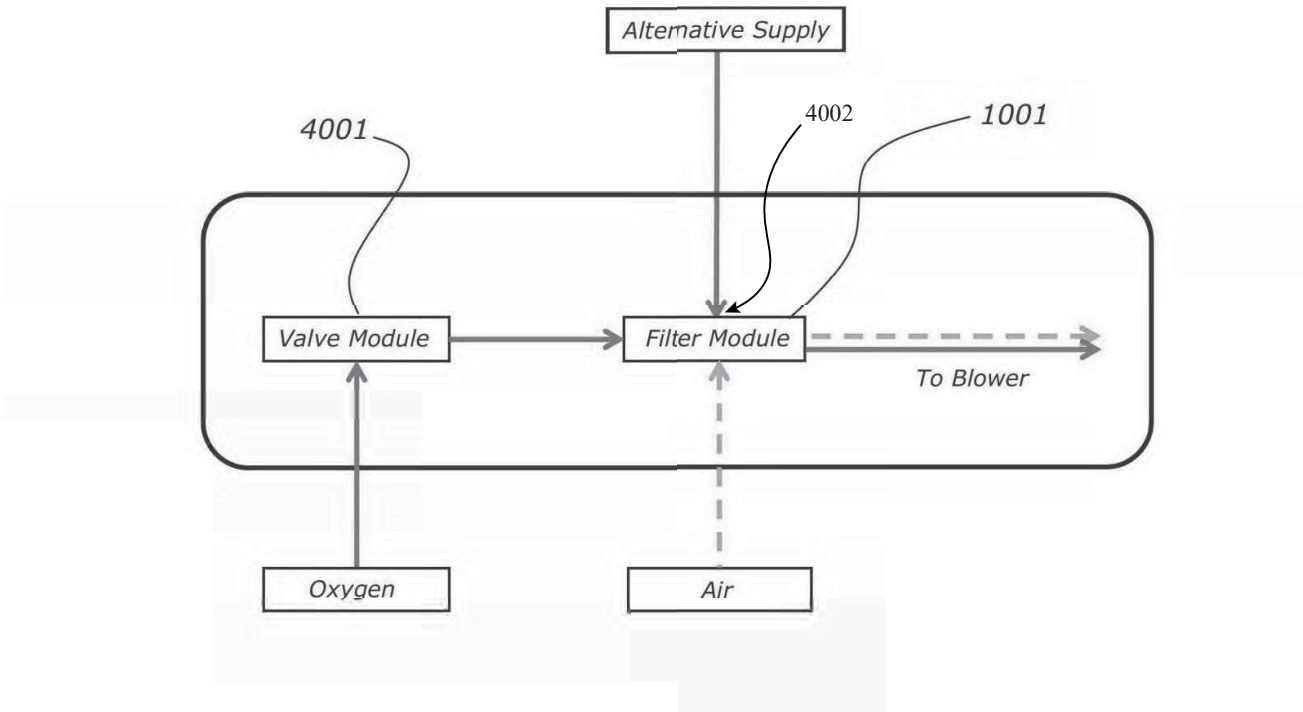

Alternative Supply
4001
4002
1001
Valve Module
Filter Module
To Blower
Oxygen
Air

Figure 6

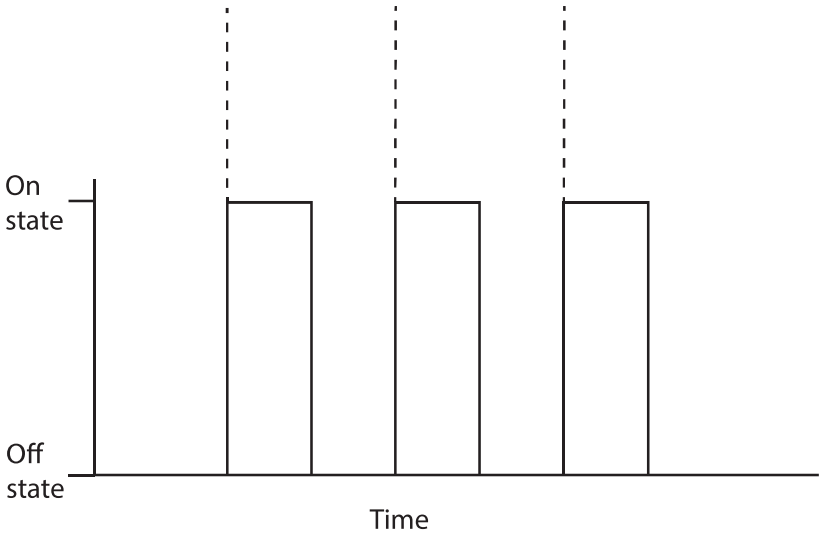


Figure 7A

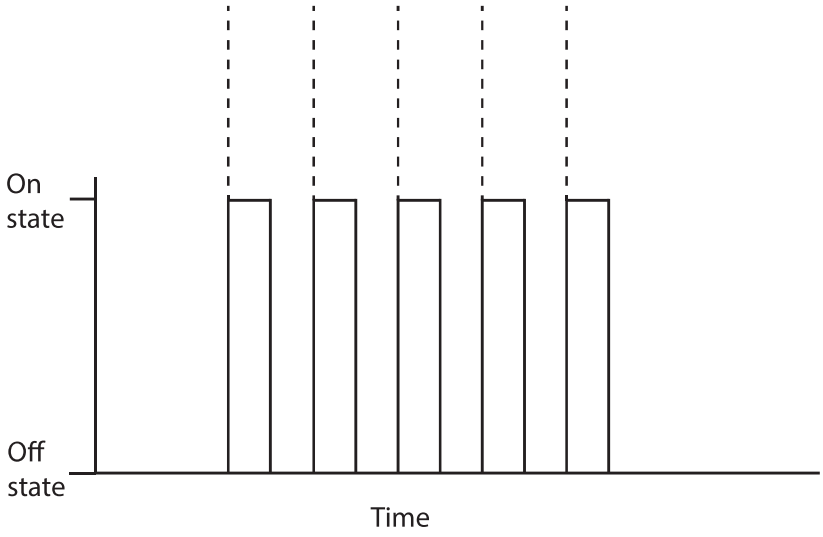


Figure 7B

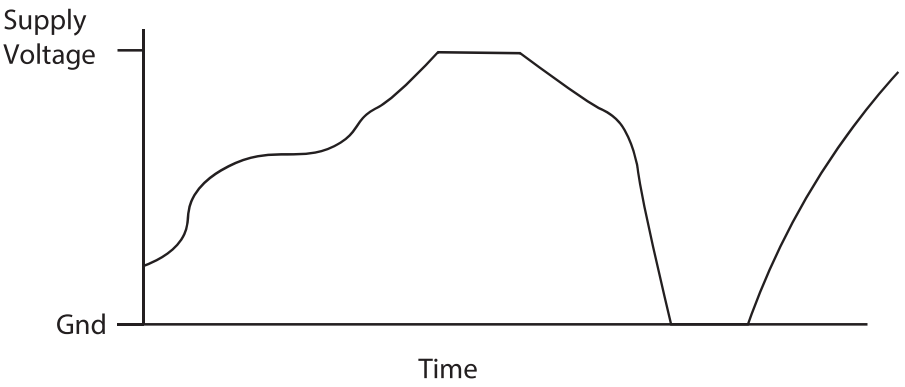


Figure 7C

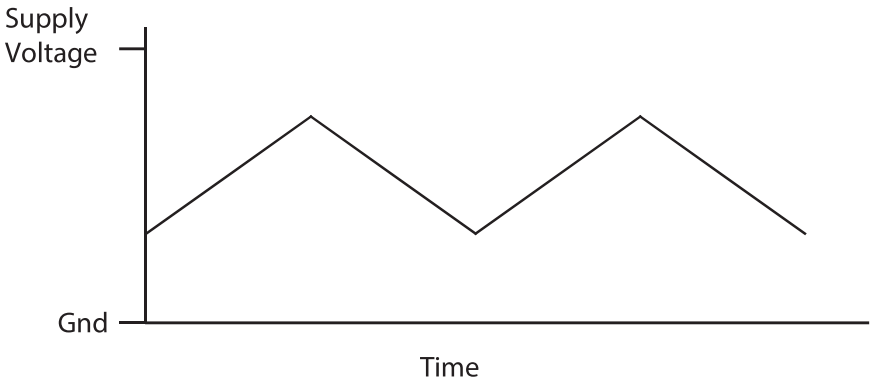


Figure 7D

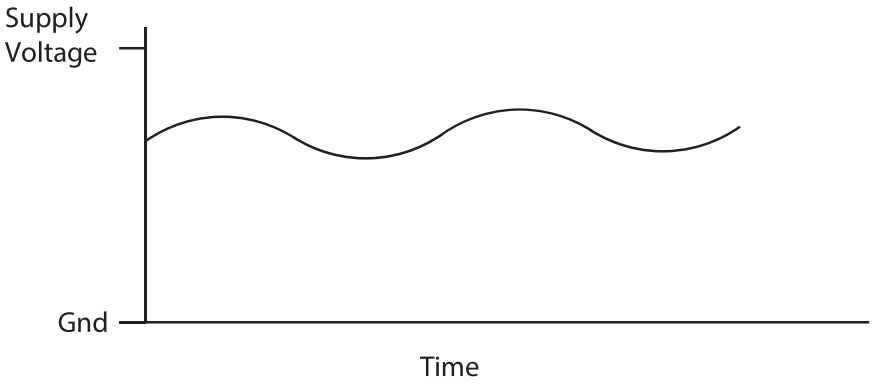


Figure 7E

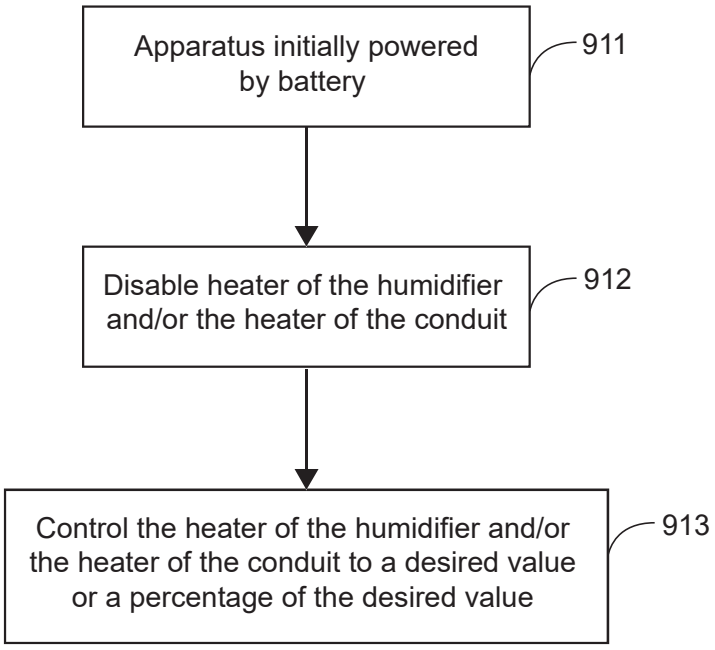


Figure 8

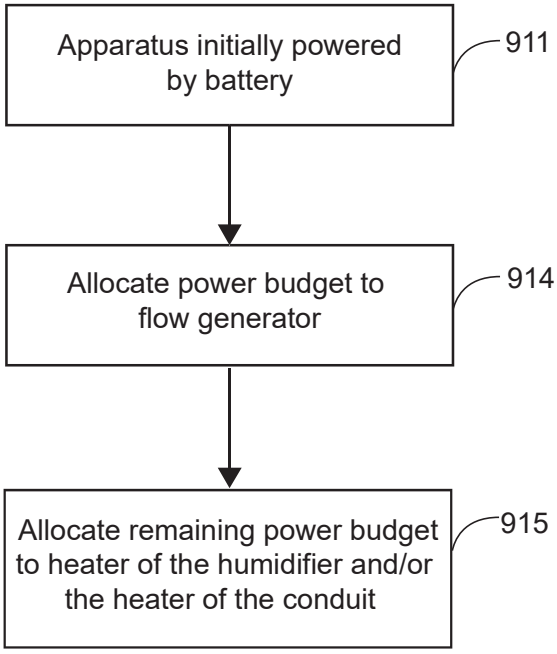


Figure 9