

Abstract

A respiratory flow therapy apparatus including a sensor module can measure a flow rate of gases or gases concentration provided to a patient. The sensor module can be located after a blower and/or mixer. The sensor module can include at least an ultrasonic transmitter, a receiver, a temperature sensor, a pressure sensor, a humidity sensor and/or a flow rate sensor. The receivers can be immersed in the gases flow path. The receivers can cancel delays in the transmitters and improve accuracy of measurements of characteristics of the gases flow. The receivers can allow for detection of a fault condition in a blower motor of the apparatus.

FIG. 1