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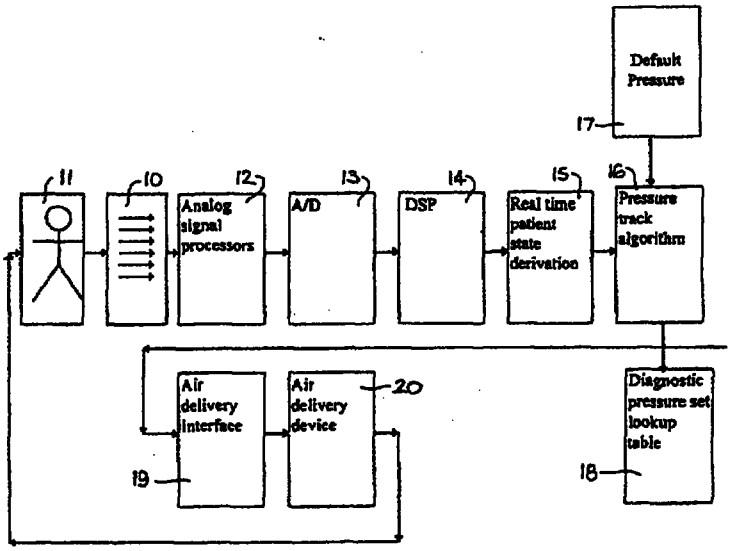
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(54) Title: APPARATUS FOR GAS DELIVERY



(57) Abstract

Apparatus for controlling gas delivery to a patient, the delivery being adapted to maintain a physiological event such as effective respiratory function and/or absence of arousals. The apparatus includes means (10, 12, 13) for monitoring one or more physiological variables such as EEG, EOG, EMG, patient position and breathing associated with the patient. The apparatus also includes means (14, 15) for deriving from the variables, data representing physiological states of the patient corresponding to the variables and means (16, 17) for determining from the data for each physiological state, a gas pressure value beyond and below which there is a deterioration in the physiological event. The deriving means may include an automatic sleep staging algorithm (41) and the determining means may include a pressure seek algorithm.