VENTILATOR MONITOR SYSTEM AND
METHOD OF USING SAME

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ABSTRACT

The present invention provides a system and method for
monitoring the ventilation support provided by a ventilator
that is supplying a breathing gas to a patient via a breathing
circuit that is in fluid communication with the lungs of
the patient. The ventilator has a plurality of selectable
ventilator setting controls governing the supply of ventilation
support from the ventilator, each setting control selectable
to a level setting. The ventilator support monitor system preferably
receives at least one ventilator setting parameter signal, each
ventilator setting parameter signal indicative of the level
settings of one ventilator setting control, monitors a plurality
of sensors, each sensor producing an output signal indicative
of a measured ventilation support parameter, to determine
the sufficiency of the ventilation support received by the
patient, and determines the desired level settings of the
ventilator setting controls in response to the received
ventilator setting parameter signal and the output signals.
The ventilator support monitor system preferably utilizes a trainable
neural network to determine the desired level settings of the
ventilator setting controls.

12 Claims, 9 Drawing Sheets