



US006796305B1

(12) **United States Patent**  
**Banner et al.**

(10) **Patent No.:** **US 6,796,305 B1**  
(45) **Date of Patent:** **Sep. 28, 2004**

(54) **VENTILATOR MONITOR SYSTEM AND METHOD OF USING SAME**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 234 days.

(21) Appl. No.: **09/608,200**

(22) Filed: **Jun. 30, 2000**

**Related U.S. Application Data**

(60) Provisional application No. 60/141,735, filed on Jun. 30, 1999.

(51) **Int. Cl.**<sup>7</sup> ..... **A61M 16/00**

(52) **U.S. Cl.** ..... **128/204.21; 128/204.18; 128/204.23; 128/925**

(58) **Field of Search** ..... **128/204.18, 204.21, 128/204.23, 920, 924, 925, 915; 706/924**

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(57) **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**

