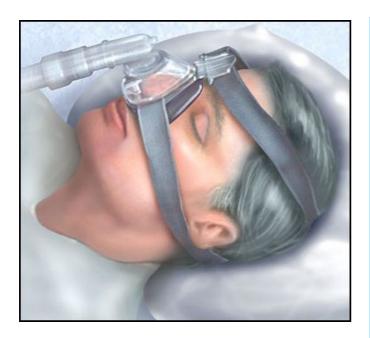


# APPARATUS AND METHOD TO MONITOR THE PARAMETERS OF MECHANICAL VENTILATORS

New technology in artificial respiration



#### Category:

**Life Sciences** 

Patent Ownership:

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Available

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## **Brief description**

This invention consists of both an apparatus and a method to monitor the operating parameters of mechanical ventilation equipment. Based on the information received by the machinery, the apparatus regulates the parameters of the ventilator. Mechanical ventilation machinery, known as ventilators, are generally set up to manage a patient's breathing by providing their lungs with air at a preset frequency.

### Innovative aspects and main advantages

The apparatus and the method mean to detect asynchronies between the inspiration and expiration conditions imposed by the machinery and the inspiration and expiration attempted by patients who are attached to the ventilator for their partial inability to breathe on their own. During artificial respiration, pathologic phenomena or breathing asynchronies between the inspiration and expiration of the patient and the phases of the ventilator may occur, causing severe damages and dangerous issues. These

asynchronies are not detected automatically in real time by the machinery unless invasive devices are used. This invention thus provides a way to quickly modify the parameters of the ventilator without resorting to invasive measures and to synchronise the induced inspiration and expiration phases with the patient's actual inspiration and expiration phases.

#### **Applications**

This invention, by providing a simple and automatic way to detect breathing asynchronies, allows to effectively manage the operation of ventilators.

# **Potential market**

The main recipients of this invention are the manufacturers of intelligent artificial ventilation solutions.

# **Development status**

Available for the market.

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