

TECHNOLOGY OFFER

OPTIMIZATION AND CONTROL SYSTEM FOR OXYGENOTHERAPY

BACKGROUND

Currently, all devices available in the market for oxygen therapy have been designed for patients with Chronic Obstructive Pulmonary Disease (COPD). However, there are other patients with idiopathic pulmonary fibrosis (IPF) and other interstitial fibrotic lung diseases, as well as lung pathologies with a deficit in arterial oxygenation such as primary or secondary lung hypertension, lung thromboembolism, and certain types of neoplasias that share the common need of a variable oxygen flow depending on the physical work that is being carried out and other physiological parameters.

TECHNOLOGY

The new device controls oxygen dosage under the requirements of autonomy. It is suitable for performance to variable oxygen flows, has a wireless design compatible with telemetry, and above all, is a user-friendly and portable device that will overcome actual models that are only suitable for COPD patients.



ADVANTAGES

- It offers a variable oxygen flow depending on the physical work and other physiological parameters.

- The device anticipates oxygen demand before having signs of oxygen desaturation
- Validated for patients with IPF (Idiopathic Pulmonary Fibrosis)
- Telemetric control.
- Is a user-friendly and portable device.

MARKET OPPORTUNITY

IPF is a rare disease that affects 10-20/100.000 people and it is lethal at 2-4 years from diagnosis. However there is an increasing demand of portable oxygenotherapy devices that makes patients day to day easier. It is estimated that oxygenotherapy market will increase a 5% in the period 2011-2015 reaching a 168M euros in 2015. Moreover there are other respiratory pathologies, with a variable oxygen flow need, that can benefit from the use of this device.

CURRENT STATE OF DEVELOPMENT

Experimental proof of concept

PATENT

European Patent application (EP 14382007), extended to PCT.

GOAL

We are seeking a company partner to further develop the technology through a co-development and/or a license agreement.

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