

Portable Hand-Held Alveolar Oxygen and Carbon Dioxide Meter

Tech ID: 21570 / UC Case 2004-087-0

TECHNOLOGY DESCRIPTION

This invention is a portable alveolar oxygen and carbon dioxide meter that shows the concentration or partial pressures of oxygen and/or carbon dioxide in the alveolar gas in the depths of the lung. It is the first portable oxygen meter and would compete only with pulse oximeters. However, pulse oximeters measure the oxygen saturation of the hemoglobin in the blood and this type of measurement does not give an accurate estimate of the alveolar oxygen content of the lung. Alveolar content is important information, useful in assessing the efficiency of respiration, especially the level of ventilation.

APPLICATIONS

This device has numerous applications and will be particularly valuable:

- ▶ In monitoring asthma and COPD in a pulmonologist's office and/or by an individual patient at home (even one receiving oxygen).
- ▶ At exercise rehabilitation facilities by exercise physiologists.
- ▶ In emergency rooms.
- ▶ On the floor of a hospital.
- ▶ In ambulances by EMT personnel.
- ▶ At high altitudes for following the process of acclimatization.

STATE OF DEVELOPMENT

A working prototype has been developed.

INTELLECTUAL PROPERTY INFO

The technology is available for further development and licensing.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,545,415	10/01/2013	2004-087

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OTHER INFORMATION

CATEGORIZED AS

- ▶ **Medical**
- ▶ Devices
- ▶ Diagnostics

RELATED CASES

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