

Title (en)

BREATHING SIMULATOR AND METHOD FOR CALIBRATING A GAS ANALYZER WITH SUCH A BREATHING SIMULATOR

Title (de)

ATEMSIMULATOR UND VERFAHREN ZUR KALIBRIERUNG EINES GASANALYSATORS MIT SOLCH EINEM ATEMSIMULATOR

Title (fr)

SIMULATEUR DE RESPIRATION ET PROCÉDÉ POUR ÉTALONNER UN ANALYSEUR DE GAZ AVEC UN TEL SIMULATEUR DE RESPIRATION

Publication

EP 3723599 A1 20201021 (EN)

Application

EP 18829233 A 20181210

Priority

- EP 17306744 A 20171211
- EP 2018084217 W 20181210

Abstract (en)

[origin: WO2019115473A1] This breathing simulator (2) is used for calibrating a gas analyzer (6) which is designed for determining a variable rate of oxygen consumption and/or a variable rate of carbon dioxide production of a living subject. The breathing simulator includes a first inlet (22) for connection to a reservoir (4) of a gas mixture with a predetermined composition, a second inlet (24) for connection to the ambient atmosphere, an outlet (26) for connection to the gas analyzer (6) and a gas mixer (28) for mixing the gas mixture coming from the first inlet (22) with air coming from the second inlet (24). The breathing simulator also includes a first fluid line (32) connecting the first inlet (22) to the gas mixer (28), a second fluid line (34) connecting the second inlet (24) to the gas mixer and a third fluid line (36) connecting the gas mixer to the outlet. A first flow regulator (42) is mounted on the first fluid line (32), while a second flow regulator (46) and a metering pump (48) are mounted on the third fluid line (36). An electronic control unit (50) pilots at least the first and second flow regulators (42,46) for simulating different breathing regimes.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2019115473A1

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