

Title (en)

CALIBRATION SYSTEM FOR AN ESOPHAGUS CATHETER WITH A BALLOON PROBE FOR DETERMINING ESOPHAGEAL PRESSURE

Title (de)

KALIBRIERSYSTEM FÜR EINEN ÖSOPHAGUSKATHETER MIT BALLONSONDE ZUR BESTIMMUNG EINES ÖSOPHAGEALEN DRUCKS

Title (fr)

SYSTÈME D'ÉTALONNAGE POUR UN CATHÉTER OESOPHAGIEN AVEC UNE SONDE À BALLONNET POUR DÉTERMINER LA PRESSION OESOPHAGIENNE

Publication

**EP 4301218 A1 20240110 (DE)**

Application

**EP 22707677 A 20220218**

Priority

- DE 102021104993 A 20210302
- EP 2022054098 W 20220218

Abstract (en)

[origin: WO2022184471A1] The invention relates to a calibration system (60) for automatically setting an intended operational filling of an esophagus catheter (48) with a balloon probe (46) for the purposes of determining an esophageal pressure (Peso), the esophagus catheter being insertable into the esophagus (34) and serving in particular for a ventilation apparatus (10), the calibration system comprising an arrangement for filling the balloon probe (46) with a measuring fluid after placing the balloon probe (46) into the esophagus (34), a pressure sensor for detecting the esophageal pressure (Peso) prevalent in the balloon probe (46), and a calibration controller (60) designed such that it incrementally changes the amount of measuring fluid in the balloon probe (46), the calibration controller (60) recording an esophageal pressure (Peso) detected by the pressure sensor for each amount of measuring fluid in the balloon probe (46) set incrementally as a measuring point in this way and assigning the esophageal pressure to the respective set amount of measuring fluid in the balloon probe (46). The calibration controller (60) is designed such that it monotonically changes the amount of measuring fluid in at least two steps to reach an end value starting from a start value, for the purposes of homing in on the respective measuring points.

IPC 8 full level

**A61B 5/03** (2006.01); **A61B 5/00** (2006.01); **A61M 16/00** (2006.01)

CPC (source: EP US)

**A61B 5/037** (2013.01 - EP US); **A61B 5/6853** (2013.01 - EP US); **A61M 16/024** (2017.07 - EP); **A61M 16/0415** (2014.02 - EP);  
**A61B 5/4836** (2013.01 - EP); **A61B 5/7221** (2013.01 - EP); **A61B 2560/0223** (2013.01 - EP US); **A61B 2560/06** (2013.01 - EP);  
**A61M 16/0409** (2014.02 - EP); **A61M 16/0434** (2013.01 - EP); **A61M 2016/0027** (2013.01 - EP); **A61M 2016/0033** (2013.01 - EP);  
**A61M 2205/702** (2013.01 - EP); **A61M 2210/105** (2013.01 - EP); **A61M 2230/60** (2013.01 - EP)

Citation (search report)

See references of WO 2022184471A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102021104993 A1 20220908**; CN 116963664 A 20231027; EP 4301218 A1 20240110; JP 2024508858 A 20240228;  
US 2024215846 A1 20240704; WO 2022184471 A1 20220909

DOCDB simple family (application)

**DE 102021104993 A 20210302**; CN 202280018636 A 20220218; EP 2022054098 W 20220218; EP 22707677 A 20220218;  
JP 2023552485 A 20220218; US 202218279682 A 20220218