

Title (en)

RESPIRATION DEVICE FOR THE TREATMENT OF SLEEP APNEA AND METHOD FOR CONTROL THEREOF

Title (de)

BEATMUNGSGERÄT ZUR THERAPIE DER SCHLAFAPNOE SOWIE VERFAHREN ZU DESSEN STEUERUNG

Title (fr)

DISPOSITIF DE RESPIRATION POUR LE TRAITEMENT DE L'APNEE DU SOMMEIL ET SON PROCEDE DE CONTROLE

Publication

EP 1706162 A1 20061004 (DE)

Application

EP 04804047 A 20041217

Priority

- EP 2004014446 W 20041217
- DE 202004000848 U 20040120

Abstract (en)

[origin: WO2005068004A1] The invention relates to a respiration device for the treatment of sleep apnea, with which a measurement of the airway resistance ROS of the person is possible using a measurement of the alternating pressure in the breathing mask, in particular, during breathing therapy. Neither an additional valveless pump for generation of a reference flow nor an additional supply tube for supply of the reference flow into the face mask are used. According to the invention, a respiration device for the therapy of sleep apnea is provided, comprising a breathing mask (6), fitted to a breathing tube (5), an electric fan (1), driven at varying speed for generation of a speed-dependent therapeutic pressure, a controller, in particular, a computer (3), for control of the fan speed and a pressure sensor (10), for determination of a pressure in the breathing mask (6), said pressure sensor (10), providing an electrical pressure measuring signal (uM), characterised in that the controller is embodied for a periodical change in the speed of the fan (1) with a constant, preferably inaudible frequency and for analysis of the alternating voltage components in the electrical pressure measuring signal (uM) due to the pressure variations generated at the outlet of the fan (1) caused by the periodic changes in speed thereof and for controlling the therapy, in particular for setting the therapeutic pressure.

IPC 8 full level

A61M 16/00 (2006.01); **A61F 5/56** (2006.01); **A61M 16/06** (2006.01)

CPC (source: EP)

A61F 5/56 (2013.01); **A61M 16/0006** (2014.02); **A61M 16/0057** (2013.01); **A61M 16/0069** (2014.02); **A61M 16/06** (2013.01); **A61M 2016/0021** (2013.01); **A61M 2016/0027** (2013.01); **A61M 2016/0036** (2013.01); **A61M 2230/40** (2013.01); **A61M 2230/65** (2013.01)

Citation (search report)

See references of WO 2005068004A1

Citation (examination)

- WO 9722377 A1 19970626 - UNIV MANITOBA [CA], et al
- WO 0010634 A1 20000302 - RESPIRONICS INC [US]

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 202004000848 U1 20040408; CN 1867370 A 20061122; CN 1867370 B 20100630; EP 1706162 A1 20061004; JP 2007518482 A 20070712; WO 2005068004 A1 20050728

DOCDB simple family (application)

DE 202004000848 U 20040120; CN 200480029671 A 20041217; EP 04804047 A 20041217; EP 2004014446 W 20041217; JP 2006548154 A 20041217