

Title (en)
CONTROLLING ARTERIAL BLOOD GAS CONCENTRATION

Title (de)
STEUERUNG DER ARTERIELLEN BLUTGASKONZENTRATION

Title (fr)
RÉGULATION DE LA CONCENTRATION DE GAZ DANS LE SANG ARTÉRIEL

Publication
EP 3003446 A4 20170111 (EN)

Application
EP 14806925 A 20140603

Priority
• US 201361831492 P 20130605
• CA 2014000473 W 20140603

Abstract (en)
[origin: WO2014194401A1] A system for controlling an amount of at least one gas X in a subject's lung to target at least one end tidal partial pressure of at least one gas X (PetXT), the system uses a control system for controlling the gas delivery device, wherein the control system implements a sequential gas delivery system and a feedback algorithm which compares a PetXT for a respective breath [i] of variable size and preferably a respective current PetX value measured by a measurement system, to obtain an error signal, the feedback algorithm adapted for generating a control signal based on the error signal, the control signal determining the amount of gas X to be inspired by the subject in at least a first portion of a respective ensuing respective inspiratory cycle to target PetXT for the respective interval.

IPC 8 full level
A61B 5/083 (2006.01); **A61M 16/00** (2006.01); **A61M 16/08** (2006.01); **A61M 16/12** (2006.01); **A61M 16/20** (2006.01); **A61M 16/10** (2006.01)

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Citation (search report)
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• [XP] WO 2013082703 A1 20130613 - KLEIN MICHAEL [CA], et al
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• [X] MARAT SLESSAREV ET AL: "Prospective targeting and control of end-tidal CO 2 and O 2 concentrations", THE JOURNAL OF PHYSIOLOGY, vol. 581, no. 3, 6 June 2007 (2007-06-06), pages 1207 - 1219, XP055175558, ISSN: 0022-3751, DOI: 10.1113/jphysiol.2007.129395
• See references of WO 2014194401A1

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