Title (en)

METHOD FOR SIMULATING RESPIRATORY DYNAMICS OF A VIRTUAL LUNG, VIRTUAL SIMULATOR, RESPIRATORY ASSEMBLY

Title (de)

VERFAHREN ZUR SIMULATION DER ATEMDYNAMIK EINER VIRTUELLEN LUNGE, VIRTUELLER SIMULATOR, ATEMBAUGRUPPE

Title (fr)

PROCEDE DE SIMULATION D'UNE DYNAMIQUE RESPIRATOIRE D'UN POUMON VIRTUEL, SIMULATEUR VIRTUEL, ENSEMBLE RESPIRATOIRE

Publication

EP 3685403 A1 20200729 (FR)

Application

EP 18773180 A 20180921

Priority

- FR 1771004 A 20170922
- EP 2018075585 W 20180921

Abstract (en)

[origin: WO2019057887A1] Method for simulating respiratory dynamics of a virtual lung on the basis of a virtual lung model (MODp) configured as a function of a first parameterization (PARA1) and at least one ventilation mode (MODv), comprising: ■ a first configuration (CONFp) of the virtual lung model (MODp); ■ a second configuration (CONFR) of a model of a virtual respiratory system (MODR) comprising a functional relationship between: o on the one hand an air flow rate (Q) inhaled or exhaled by a virtual patient and; o on the other hand at least one considered pressure (P) in the respiratory circuit, o said considered pressure (P) being a resultant pressure (Prest) at which is substracted an internal pressure (Pi) comprising a muscular pressure (Pmus) and the pressure inside the lung (PP); ■ a third configuration (CONFv) of at least one ventilation mode (MODv), the method comprising generation of at least one curve (TRACE(Vpf(Pp))).

IPC 8 full level

G16H 50/50 (2018.01)

CPC (source: EP US)

A61M 16/026 (2017.07 - US); **G06F 30/28** (2020.01 - US); **G09B 23/288** (2013.01 - US); **G16H 40/40** (2017.12 - US); **G16H 40/67** (2017.12 - US); **G16H 50/20** (2017.12 - US); **G16H 50/30** (2017.12 - US); **G16H 50/50** (2017.12 - EP US); A61M 16/022 (2017.07 - US); G06F 2111/10 (2020.01 - US); G06F 2113/08 (2020.01 - US)

Citation (search report)

See references of WO 2019057881A1

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

DOCDB simple family (publication)

WO 2019057887 A1 20190328; EP 3685403 A1 20200729; EP 3685404 A1 20200729; FR 3071398 A1 20190329; US 2020303080 A1 20200924; US 2020312462 A1 20201001; WO 2019057881 A1 20190328

DOCDB simple family (application)

EP 2018075594 W 20180921; EP 18773180 A 20180921; EP 18773181 A 20180921; EP 2018075585 W 20180921; FR 1771004 A 20170922; US 201816649464 A 20180921; US 201816649490 A 20180921