

Title (en)  
A MASK AND CONTROL METHOD

Title (de)  
MASKE UND STEUERUNGSVERFAHREN

Title (fr)  
MASQUE ET PROCÉDÉ DE COMMANDE

Publication  
**EP 3658239 B1 20210224 (EN)**

Application  
**EP 18753063 A 20180720**

Priority  

- CN 2017094942 W 20170728
- EP 17187716 A 20170824
- EP 2018069716 W 20180720

Abstract (en)  
[origin: WO2019020503A1] The invention provides a mask which incorporates an air chamber, a filter, a fan arrangement, a sensor and a controller. The sensor detects a parameter relating to the temperature and/or relative humidity of air inhaled and exhaled over time by a user of the mask. The controller calculates a first value which depends on a first time derivative of the parameter. Based on this calculation, the controller determines a start of an inhalation and/or a start of an exhalation of the user. Therefore, the controller is able to accurately determine the inhalation and/or exhalation cycle of the user, thereby compensating for a time lag between the detected variation of the parameter over time and the inhalation and exhalation timing of the user. With this information, the controller operates the fan arrangement in synchronism with the inhalation and/or exhalation cycle of the user.

IPC 8 full level  
**A62B 18/08** (2006.01); **A62B 7/10** (2006.01); **A62B 18/00** (2006.01); **A62B 18/04** (2006.01)

CPC (source: EP)  
**A62B 7/10** (2013.01); **A62B 18/006** (2013.01); **A62B 18/08** (2013.01)

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

DOCDB simple family (publication)  
**WO 2019020503 A1 20190131**; CN 111278512 A 20200612; CN 111278512 B 20220401; EP 3658239 A1 20200603; EP 3658239 B1 20210224

DOCDB simple family (application)  
**EP 2018069716 W 20180720**; CN 201880049636 A 20180720; EP 18753063 A 20180720