

Title (en)
A MASK AND CONTROL METHOD

Title (de)
MASKE UND STEUERUNGSVERFAHREN

Title (fr)
MASQUE ET PROCÉDÉ DE COMMANDE

Publication
EP 3444012 A1 20190220 (EN)

Application
EP 17186248 A 20170815

Priority
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Abstract (en)
The invention provides a breathing assistance mask. A mask is provided that incorporates an air chamber, a filter, an inhalation fan, an exhalation fan, a sensor and a controller. The inhalation fan draws air through the filter and into the mask. The exhalation fan exhausts the exhaled air. The controller continuously runs the inhalation and exhalation fans when the mask is being worn. The controller provides a first and second rotation speed for the fans, with the first rotation speed being non-zero and lower than the second rotation speed. During inhalation, the exhalation fan runs at the first inhalation speed and the inhalation fan runs at the second inhalation speed. During exhalation, the inhalation fan runs at the first inhalation speed and the exhalation fan runs at the second inhalation speed. The control of the inhalation and exhalation fans ensures that the air flow in the mask is synchronized with the breathing of the user, ultimately making breathing more comfortable in the mask.

IPC 8 full level
A62B 18/00 (2006.01)

CPC (source: EP)
A62B 18/006 (2013.01)

Citation (applicant)
• GB 2032284 A 19800508 - RACAL SAFETY LTD
• WO 2016157159 A1 20161006 - MICROSFERE PTE LTD [SG]

Citation (search report)
• [ID] WO 2016157159 A1 20161006 - MICROSFERE PTE LTD [SG]
• [I] CN 104548406 A 20150429 - FUN WEY
• [I] JP 2008295993 A 20081211 - TOYO LIVING CO LTD
• [A] WO 2004112680 A2 20041229 - RESMED LTD [AU], et al

Cited by
EP3770578A1; CN114041048A; WO2020207908A1

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