

Title (en)  
METHOD AND DEVICE FOR AIR-CONDITIONING A ROOM WITH AN AIR MIXTURE HAVING A LOWERED OXYGEN PARTIAL PRESSURE

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR KLIMATISIERUNG EINES RAUMES MIT EINEM LUFTGEMISCH MIT ABGESENKTEM  
SAUERSTOFFPARTIALDRUCK

Title (fr)  
PROCEDE ET DISPOSITIF DE CLIMATISATION D'UNE SALLE AU MOYEN D'UN MELANGE D'AIR A PRESSION PARTIELLE D'OXYGENE  
REDUITE

Publication  
**EP 1654051 A1 20060510 (DE)**

Application  
**EP 04740877 A 20040709**

Priority  
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• DE 10332565 A 20030711  
• DE 10343342 A 20030912

Abstract (en)  
[origin: WO2005007273A1] The invention relates to a method and a device (10) for air-conditioning at least one room (38) with an air mixture having a lowered oxygen partial pressure in comparison with ambient air in an overall pressure substantially corresponding to an ambient air pressure. According to the inventive method, at least part of the oxygen (O<sub>2</sub>) contained in the ambient air is chemically reduced to a reaction product, preferably the reaction product is separated and the thus treated low-oxygen air mixture is fed as inlet air to the room to be air-conditioned. A core element of the inventive device is an O<sub>2</sub> reductor (16) for reducing at least part of the oxygen contained in the ambient air into a reaction product. The O<sub>2</sub> reductor (16) can preferably be a fuel cell, a combustion engine, a turbine or a combustion chamber.

IPC 1-7  
**B01D 53/46**; **B01D 53/86**

IPC 8 full level  
**B01D 53/46** (2006.01); **B01D 53/86** (2006.01)

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**B01D 53/46** (2013.01); **B01D 53/86** (2013.01); **A63B 2213/006** (2013.01); **Y02C 20/20** (2013.01)

Citation (search report)  
See references of WO 2005007273A1

Citation (examination)  
RU 2129903 C1 19990510 - SEREBRЯKOV VLADIMIR NIKOLAEVI

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DOCDB simple family (publication)  
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