

Title (en)

METHOD AND DEVICE FOR REDUCING THE CARBON DIOXIDE CONCENTRATION IN AIR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ABREICHERUNG VON KOHLENDIOXID AUS LUFT

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT DE REDUIRE LA CONCENTRATION DE L'AIR EN DIOXYDE DE CARBONE

Publication

EP 1581330 A1 20051005 (DE)

Application

EP 03814459 A 20030711

Priority

- DE 10300141 A 20030107
- EP 0307533 W 20030711

Abstract (en)

[origin: WO2004060538A1] The invention relates to a method for reducing the carbon dioxide concentration in air of a closed or partially closed unit of space. The inventive method comprises the steps of removing an air flow from the unit of space, guiding the air flow in a membrane systems that contains at least one membrane module having a CO₂/O₂ selectivity of greater 2, removing the carbon dioxide permeated through the membrane, and returning the air flow that has been depleted of carbon dioxide in the membrane system to the unit of space. The inventive method can be optionally combined with an oxygen enrichment method. The invention also relates to corresponding devices for carrying out the inventive method.

IPC 1-7

B01D 53/22; **B01D 53/62**

IPC 8 full level

B01D 53/22 (2006.01)

CPC (source: EP US)

B01D 53/22 (2013.01 - EP US); **Y02C 20/40** (2020.08 - EP US)

Citation (search report)

See references of WO 2004060538A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

Designated extension state (EPC)

LT LV

DOCDB simple family (publication)

WO 2004060538 A1 20040722; AU 2003254338 A1 20040729; BR 0317946 A 20051129; CA 2527868 A1 20040722; CN 100379486 C 20080409; CN 1723074 A 20060118; DE 10300141 A1 20040715; EP 1581330 A1 20051005; JP 2006512946 A 20060420; US 2008127821 A1 20080605; US 7601202 B2 20091013

DOCDB simple family (application)

EP 0307533 W 20030711; AU 2003254338 A 20030711; BR 0317946 A 20030711; CA 2527868 A 20030711; CN 03825773 A 20030711; DE 10300141 A 20030107; EP 03814459 A 20030711; JP 2004564186 A 20030711; US 17661105 A 20050707