Title (en)

SORPTION CONCENTRATOR WITH ELECTRICALLY HEATED DESORPTION REGENERATION

Title (de)

SORPTIONSKONZENTRATOR MIT ELEKTRISCH ERWÄRMTER DESORPTIONSREGENERATION

Title (fr)

CONCENTRATEUR A SORPTION A REGENERATION PAR DESORPTION CHAUFFE ELECTRIQUEMENT

Publication

EP 1539328 A4 20061025 (EN)

Application

EP 03711122 A 20030218

Priority

- US 0304941 W 20030218
- US 39889402 P 20020726

Abstract (en)

[origin: WO2004011126A1] A sorption concentrator for removing contaminants from a gas stream comprising a plurality of sorption units, each having a semi-conductive honeycomb substrate having convoluted surfaces and parallel channels coated with a sorption material, a gas flow system directing gas to be cleaned, through a majority of the sorption units and directing clean gas through the remaining sorption units during a regeneration cycle, and a source of current connected to the semi-conductive foil substrate resistively heating the sorption units during the regeneration cycle. The honeycomb construction is preferably formed of aluminum providing rapid heating and eliminating the requirement for heated desorb gas.

IPC 1-7

B01D 53/06

IPC 8 full level

B01D 53/04 (2006.01); **B01D 53/06** (2006.01); **B01J 20/02** (2006.01); **B01J 20/26** (2006.01); **B01J 20/28** (2006.01); **B01J 20/34** (2006.01); **C23G 5/00** (2006.01)

CPC (source: EP)

B01D 53/0438 (2013.01); **B01D 53/06** (2013.01); B01D 53/0446 (2013.01); B01D 2253/102 (2013.01); B01D 2253/108 (2013.01); B01D 2253/202 (2013.01); B01D 2253/25 (2013.01); B01D 2253/3425 (2013.01); B01D 2257/708 (2013.01); B01D 2259/40086 (2013.01); B01D 2259/40096 (2013.01)

Citation (search report)

- [X] US 5308457 A 19940503 - DALLA BETTA RALPH A [US], et al
- [A] DE 4225272 A1 19940203 - BLUECHER GMBH [DE]
- See references of WO 2004011126A1

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 SE SI SK TR

DOCDB simple family (publication)

WO 2004011126 A1 20040205; AU 2003215303 A1 20040216; CA 2485915 A1 20040205; EP 1539328 A1 20050615; EP 1539328 A4 20061025; JP 2005533643 A 20051110

DOCDB simple family (application)

US 0304941 W 20030218; AU 2003215303 A 20030218; CA 2485915 A 20030218; EP 03711122 A 20030218; JP 2004524469 A 20030218