

Title (en)
GAS SEPARATION DEVICE

Title (de)
GASTRENNVORRICHTUNG

Title (fr)
DISPOSITIF DE SÉPARATION DE GAZ

Publication
EP 2627432 A2 20130821 (DE)

Application
EP 11767019 A 20111010

Priority
• DE 102010042261 A 20101011
• EP 2011067656 W 20111010

Abstract (en)
[origin: WO2012049128A2] The invention relates to a gas separation device (1), comprising a gas separation layer (20), a first gas volume (14), and a second gas volume (15), wherein the gas separation layer (20) is arranged between the first gas volume (14) and the second gas volume (15), wherein the gas separation layer (20) comprises at least one aperture (22) which connects the first gas volume (14) to the second gas volume (15), wherein the aperture (22) is designed to taper from the first gas volume (14) to the second gas volume (15) and is dimensioned to enrich a component (30) of the second gas volume (15) in the first gas volume (14), wherein the aperture (22) is designed as an elongated opening in the gas separation layer (20) and/or comprises a gas reflection layer (22) on a surface (33), wherein the aperture (22) has a minimum opening width (d) of essentially one time to twenty times the mean free path length of the component (30) of the second gas volume (15) to be enriched.

IPC 8 full level
B01D 53/22 (2006.01); **B01D 63/08** (2006.01)

CPC (source: EP US)
B01D 46/0039 (2013.01 - US); **B01D 53/228** (2013.01 - EP US); **B01D 2256/18** (2013.01 - EP US); **Y10T 29/49826** (2015.01 - EP US)

Citation (search report)
See references of WO 2012049128A2

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)
DE 102010042261 A1 20120412; EP 2627432 A2 20130821; US 2013291730 A1 20131107; WO 2012049128 A2 20120419; WO 2012049128 A3 20120607

DOCDB simple family (application)
DE 102010042261 A 20101011; EP 11767019 A 20111010; EP 2011067656 W 20111010; US 201313861088 A 20130411