

Title (en)

METHOD FOR SEPARATING CARBON DIOXIDE FROM FLUE GASES AND ASSOCIATED DEVICE

Title (de)

VERFAHREN ZUR ABTRENNUNG VON KOHLENDIOXID AUS RAUCHGASEN UND ZUGEHÖRIGE VORRICHTUNG

Title (fr)

PROCÉDÉ DE SÉPARATION DE DIOXYDE DE CARBONE DE GAZ DE COMBUSTION ET DISPOSITIF ASSOCIÉ

Publication

EP 2164613 A1 20100324 (DE)

Application

EP 08774407 A 20080627

Priority

- EP 2008058240 W 20080627
- DE 102007030069 A 20070629

Abstract (en)

[origin: WO2009003929A1] Adsorption methods for separating carbon dioxide (CO₂) from flue gases are known. According to the invention, the CO₂ is placed on an adsorber and an adsorption reaction with ammonia, that is used as a chemical absorption agent, takes place. The CO₂ extracted from the waste gas is joined to the ammonia on the catalytic surface thereof by means of a heterogeneous, catalytic reaction. At least two reactors (10, 10', 20, 20'; 30, 30') are provided in the associated device, said reactors, which operate alternately, being switched between the adsorption of CO₂ and the regeneration of the absorption agent.

IPC 8 full level

B01D 53/86 (2006.01); **C01B 32/50** (2017.01)

CPC (source: EP US)

B01D 53/864 (2013.01 - EP US); **B01D 2253/108** (2013.01 - EP US); **B01D 2255/20707** (2013.01 - EP US); **B01D 2255/20723** (2013.01 - EP US); **B01D 2257/504** (2013.01 - EP US); **B01D 2258/06** (2013.01 - EP US); **Y02C 20/40** (2020.08 - EP US)

Citation (search report)

See references of WO 2009003929A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007030069 A1 20090102; CN 101790409 A 20100728; EP 2164613 A1 20100324; RU 2010102885 A 20110810;
RU 2473379 C2 20130127; US 2010196234 A1 20100805; WO 2009003929 A1 20090108

DOCDB simple family (application)

DE 102007030069 A 20070629; CN 200880104824 A 20080627; EP 08774407 A 20080627; EP 2008058240 W 20080627;
RU 2010102885 A 20080627; US 66512008 A 20080627