

Title (en)
APPARATUS AND METHOD FOR REMOVING CARBON DIOXIDE (CO₂) FROM THE FLUE GAS OF A FURNACE AFTER THE ENERGY CONVERSION

Title (de)
VORRICHTUNG UND VERFAHREN ZUR ENTFERNUNG VON KOHLENDIOXID (CO₂) AUS DEM RAUCHGAS EINER FEUERUNGSANLAGE NACH DER ENERGIEUMWANDLUNG

Title (fr)
DISPOSITIF ET PROCÉDÉ PERMETTANT D'ÉLIMINER LE DIOXYDE DE CARBONE (CO₂) DU GAZ DE COMBUSTION D'UNE INSTALLATION DE CHAUFFAGE APRÈS LA CONVERSION D'ÉNERGIE & xA;

Publication
EP 2414076 A1 20120208 (DE)

Application
EP 10718043 A 20100319

Priority
• DE 2010000322 W 20100319
• DE 102009016015 A 20090402

Abstract (en)
[origin: WO2010111996A1] The invention relates to a method for separating carbon dioxide from the flue gas from an energy conversion, wherein the flue gas initially is supplied to a membrane unit, which comprises at least one membrane module having a CO₂-selective membrane, in which part of the CO₂ is separated from the flue gas as an enriched CO₂ permeate. The flue gas depleted in this way (retentate) is then supplied to at least one further CO₂ separating unit, in which part of the CO₂ is separated from the flue gas by an adsorption means or an absorption means. The invention further relates to an apparatus for separating CO₂ from a flue gas, which is suited for carrying out said method and has a membrane unit, comprising at least one membrane module having a CO₂-selective membrane and a further CO₂-separating unit, comprising an adsorption means or an absorption means.

IPC 8 full level
B01D 53/14 (2006.01); **B01D 53/22** (2006.01)

CPC (source: EP US)
B01D 53/1475 (2013.01 - EP US); **B01D 53/229** (2013.01 - EP US); **B01D 2257/504** (2013.01 - EP US); **Y02A 50/20** (2017.12 - EP US); **Y02C 20/40** (2020.08 - EP US)

Citation (search report)
See references of WO 2010111996A1

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
DE 102009016015 A1 20101007; EP 2414076 A1 20120208; US 2012111192 A1 20120510; US 8728201 B2 20140520; WO 2010111996 A1 20101007

DOCDB simple family (application)
DE 102009016015 A 20090402; DE 2010000322 W 20100319; EP 10718043 A 20100319; US 201013138783 A 20100319