

Title (en)

GAS SEPARATION HAVING A MEMBRANE SEPARATION UNIT

Title (de)

GASTRENNUNG MIT EINER MEMBRANTRENNEINHEIT

Title (fr)

SÉPARATION DE GAZ À L'AIDE D'UNE UNITÉ DE SÉPARATION À MEMBRANE

Publication

**EP 2953706 A1 20151216 (DE)**

Application

**EP 14700253 A 20140108**

Priority

- EP 13153972 A 20130205
- EP 2014050226 W 20140108
- EP 14700253 A 20140108

Abstract (en)

[origin: EP2762220A1] The method involves reducing a carbon dioxide-portion in lean gas and/or exchanging gas portions in the lean gas against oxygen in a membrane separation unit (1). A retentate is subsequently utilized in an utilization unit, which is provided downstream to the membrane separation unit on a retentate side. A permeate of the membrane separation unit is mixed to hot exhaust gas of the utilization unit, and reoxidized. A partial pressure difference between the permeate and the retentate in the membrane separation unit is increased by pressurization of feed gas. An independent claim is also included for a device for performing a method for utilization of lean gas.

IPC 8 full level

**B01D 53/22** (2006.01); **B01D 53/30** (2006.01); **B01D 53/38** (2006.01); **C10L 3/10** (2006.01); **F02B 43/00** (2006.01)

CPC (source: EP)

**B01D 53/22** (2013.01); **B01D 53/30** (2013.01); **B01D 2256/245** (2013.01); **B01D 2257/504** (2013.01); **B01D 2258/05** (2013.01); **Y02C 20/20** (2013.01); **Y02C 20/40** (2020.08); **Y02E 50/30** (2013.01)

Citation (search report)

See references of WO 2014121964A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2762220 A1 20140806**; **EP 2762220 B1 20200318**; DK 2762220 T3 20200622; EP 2953706 A1 20151216; WO 2014121964 A1 20140814

DOCDB simple family (application)

**EP 13153972 A 20130205**; DK 13153972 T 20130205; EP 14700253 A 20140108; EP 2014050226 W 20140108