

Title (en)

CARBON DIOXIDE RECOVERY METHOD USING CRYO-CONDENSATION

Title (de)

KOHLENDIOXIDGEWINNUNGSVERFAHREN UNTER VERWENDUNG VON KRYOKONDENSATION

Title (fr)

PROCEDE DE CAPTURE DU DIOXYDE DE CARBONE PAR CRYO-CONDENSATION

Publication

EP 2379968 A1 20111026 (FR)

Application

EP 09803847 A 20091214

Priority

- FR 2009052505 W 20091214
- FR 0858872 A 20081219

Abstract (en)

[origin: WO2010076463A1] Disclosed is a method for producing at least one gas having a low CO₂ concentration and one or more primary fluids having a high CO₂ concentration from a fluid which is to be treated and contains CO₂ and at least one compound that is more volatile than CO₂. Said method comprises the following steps: a) the fluid to be treated is subjected to a first cooling process using heat exchange without the fluid undergoing a change of state; b) at least some of the fluid to be treated and cooled in step a) is cooled a second time such that a solid is obtained which contains mainly CO₂ and at least the gas having a low CO₂ concentration; and c) a step in which at least some of said solid is liquefied such that the one or more primary fluids having a high CO₂ concentration are obtained. The disclosed method is characterized in that at least part of the first cooling process in step a) is carried out by heating at least some of the one or more primary fluids having a high CO₂ concentration.

IPC 8 full level

F25J 3/06 (2006.01); **B01D 53/00** (2006.01); **B01D 53/62** (2006.01)

CPC (source: EP US)

B01D 53/002 (2013.01 - EP US); **B01D 2257/504** (2013.01 - EP US)

Citation (search report)

See references of WO 2010076463A1

Citation (examination)

US 3614872 A 19711026 - TASSONEY JOSEPH P, et al

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)

FR 2940414 A1 20100625; **FR 2940414 B1 20121026**; CN 102257342 A 20111123; CN 102257342 B 20140716; EP 2379968 A1 20111026; US 2011252828 A1 20111020; WO 2010076463 A1 20100708

DOCDB simple family (application)

FR 0858872 A 20081219; CN 200980151178 A 20091214; EP 09803847 A 20091214; FR 2009052505 W 20091214; US 200913133852 A 20091214