

Title (en)
METHOD AND DEVICE FOR EXTRACTING CARBON DIOXIDE FROM THE ATMOSPHERE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR EXTRAKTION VON KOHLENDIOXID AUS DER ATMOSPHERE

Title (fr)
PROCEDE ET DISPOSITIF D'EXTRACTION DE DIOXYDE DE CARBONE DE L'ATMOSPHERE

Publication
EP 2342309 A2 20110713 (FR)

Application
EP 09755991 A 20091008

Priority

- FR 2009051920 W 20091008
- FR 0857066 A 20081017
- FR 0857903 A 20081121

Abstract (en)
[origin: WO2010043799A2] The invention relates to a method for extracting carbon dioxide from the atmosphere, said method comprising the thermochemical conversion of biomasses as a natural intermediate vector for storing carbon dioxide, the carbon dioxide being trapped by a thermochemical cycle (3) that comprises a combustion reactor (8) and an oxidation chamber (9) connected together, and in which flow metal oxides which are alternately oxidised and reduced and which ensure the oxygen supply for the combustion, wherein said thermochemical conversion is achieved using a pyrolysis reactor (2) and said thermochemical cycle (3). According to the invention, the biomasses are dried (1) by air-lean fumes (13) exiting from the oxidation chamber (9) of said thermochemical cycle before said pyrolysis.

IPC 8 full level
C10J 1/213 (2012.01); **C10J 3/66** (2006.01); **B01D 53/62** (2006.01); **C10J 3/82** (2006.01); **F23C 10/00** (2006.01); **F26B 17/12** (2006.01)

CPC (source: EP)
C10J 3/482 (2013.01); **C10J 3/725** (2013.01); **F26B 17/12** (2013.01); **F26B 21/14** (2013.01); **C10J 2300/0903** (2013.01); **C10J 2300/0916** (2013.01); **C10J 2300/0956** (2013.01); **C10J 2300/0969** (2013.01); **C10J 2300/0973** (2013.01); **C10J 2300/0983** (2013.01); **C10J 2300/1606** (2013.01); **C10J 2300/1637** (2013.01); **C10J 2300/1659** (2013.01); **C10J 2300/1807** (2013.01); **F23C 2900/99008** (2013.01); **F23J 2900/15061** (2013.01); **F26B 2200/02** (2013.01); **Y02E 20/34** (2013.01); **Y02E 50/30** (2013.01); **Y02P 20/129** (2015.11)

Citation (search report)
See references of WO 2010043799A2

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

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
WO 2010043799 A2 20100422; WO 2010043799 A3 20101125; CA 2740501 A1 20100422; EP 2342309 A2 20110713; FR 2937333 A1 20100423; FR 2937333 B1 20110617; FR 2937334 A1 20100423

DOCDB simple family (application)
FR 2009051920 W 20091008; CA 2740501 A 20091008; EP 09755991 A 20091008; FR 0857066 A 20081017; FR 0857903 A 20081121