

Title (en)

METHOD AND DEVICE FOR CONVERTING CARBONACEOUS RAW MATERIALS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR UMWANDLUNG KOHLENSTOFFHALTIGER ROHSTOFFE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE TRANSFORMATION DE MATIÈRES BRUTES CARBONÉES

Publication

EP 2265696 A2 20101229 (DE)

Application

EP 09713765 A 20090228

Priority

- EP 2009001441 W 20090228
- DE 102008014297 A 20080228

Abstract (en)

[origin: WO2009106357A2] The invention relates to a method and a device (35) for converting carbonaceous raw materials and in particular biomass into fuels. In this method, firstly an allothermic gasification of the raw materials is performed in a gasifier (1) using heated water steam (3). After purification of the synthesis gas produced during the gasification and cooling of the synthesis gas, the synthesis gas is converted into a liquid fuel using a catalyzed chemical reaction. According to the invention, the heated water steam is used both as a gasification agent and also as a heat carrier for the gasification and has a temperature which is greater than 1000°C.

IPC 8 full level

C10J 3/14 (2006.01); **C10J 3/16** (2006.01)

CPC (source: EP US)

C10G 2/32 (2013.01 - EP US); **C10J 3/02** (2013.01 - EP US); **C10J 3/14** (2013.01 - EP US); **C10J 3/16** (2013.01 - EP US); **C10J 3/721** (2013.01 - EP US); **C10J 3/80** (2013.01 - EP US); **C10J 3/84** (2013.01 - EP US); **C10J 3/86** (2013.01 - EP US); **C10K 1/026** (2013.01 - EP US); **C10K 1/08** (2013.01 - EP US); **C10K 1/10** (2013.01 - EP US); **C10K 3/008** (2013.01 - EP US); **C10G 2300/1011** (2013.01 - EP US); **C10G 2300/807** (2013.01 - EP US); **C10J 2300/0916** (2013.01 - EP US); **C10J 2300/0956** (2013.01 - EP US); **C10J 2300/0973** (2013.01 - EP US); **C10J 2300/1215** (2013.01 - EP US); **C10J 2300/1659** (2013.01 - EP US); **C10J 2300/1675** (2013.01 - EP US); **C10J 2300/1687** (2013.01 - EP US); **C10J 2300/1853** (2013.01 - EP US); **C10J 2300/1884** (2013.01 - EP US); **Y02P 20/129** (2015.11 - EP US); **Y02P 20/145** (2015.11 - EP US); **Y02P 30/20** (2015.11 - EP US)

Citation (search report)

See references of WO 2009106357A2

Citation (examination)

US 2007227069 A1 20071004 - NORBECK JOSEPH N [US], 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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009106357 A2 20090903; **WO 2009106357 A3 20100325**; AU 2009218694 A1 20090903; AU 2009218694 B2 20140213; BR PI0907997 A2 20190219; CA 2716387 A1 20090903; CN 101970617 A 20110209; CN 101970617 B 20141029; EA 020334 B1 20141030; EA 201070910 A1 20110429; EP 2265696 A2 20101229; JP 2011514923 A 20110512; JP 5777887 B2 20150909; NZ 587568 A 20121130; UA 104719 C2 20140311; US 2011035990 A1 20110217

DOCDB simple family (application)

EP 2009001441 W 20090228; AU 2009218694 A 20090228; BR PI0907997 A 20090228; CA 2716387 A 20090228; CN 200980107164 A 20090228; EA 201070910 A 20090228; EP 09713765 A 20090228; JP 2010548036 A 20090228; NZ 58756809 A 20090228; UA A201011512 A 20090228; US 91958709 A 20090228