

Title (en)

GASIFICATION REACTOR FOR PRODUCING CRUDE GAS

Title (de)

VERGASUNGSREAKTOR ZUR HERSTELLUNG VON ROHGAS

Title (fr)

RÉACTEUR DE GAZÉIFICATION POUR LA FABRICATION DE GAZ BRUT

Publication

EP 2459685 B1 20150902 (DE)

Application

EP 10734696 A 20100716

Priority

- DE 102009035051 A 20090728
- EP 2010004338 W 20100716

Abstract (en)

[origin: WO2011012230A2] The invention relates to a gasification reactor for producing crude gas containing CO or H₂ by gasification of ash-containing fuel with oxygen-containing gas at temperatures above the fusion temperature of the ash, wherein a reaction chamber, formed by a membrane wall that is flown through by a cooling medium, is provided inside a pressure vessel. Furthermore, a transition area and a quenching chamber as well as a slag/water bath are provided subsequently in the direction of gravity. The aim of the invention is in particular to provide a slag container which is of economical design and has at the same time manifold functions. Said aim is achieved by the fact that a funnel-shaped slag collecting tank (12) is provided in the slag/water bath (13), which is provided with a second funnel-shaped insert (15) as deposition cone in the direction of incidence of the slag (arrow 18), the funnel wall of said insert forming a circumferential annular gap (17) to the slag collecting tank and whose free edge (16) is positioned above the free edge (14) of the slag collecting tank (12).

IPC 8 full level

C10J 3/50 (2006.01); **C10J 3/52** (2006.01); **C10J 3/76** (2006.01); **C10J 3/84** (2006.01)

CPC (source: EP KR US)

C10J 3/506 (2013.01 - EP KR US); **C10J 3/526** (2013.01 - EP KR US); **C10J 3/76** (2013.01 - EP KR US); **C10J 3/78** (2013.01 - EP KR US);
C10J 3/84 (2013.01 - EP KR US); **C10J 3/845** (2013.01 - EP KR US); **C10J 2300/0916** (2013.01 - EP KR US);
C10J 2300/093 (2013.01 - EP KR US); **C10J 2300/0946** (2013.01 - EP KR US); **C10J 2300/0956** (2013.01 - EP US);
C10J 2300/0959 (2013.01 - EP US); **C10J 2300/1846** (2013.01 - EP US)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011012230 A2 20110203; WO 2011012230 A3 20110616; AU 2010278407 A1 20120202; AU 2010278407 B2 20140501;
BR 112012001720 A2 20160412; BR 112012001720 B1 20180206; CA 2767849 A1 20110203; CA 2767849 C 20171128;
CN 102471712 A 20120523; CN 102471712 B 20140115; DE 102009035051 A1 20110210; DE 102009035051 B4 20110421;
EP 2459685 A2 20120606; EP 2459685 B1 20150902; ES 2550053 T3 20151104; HK 1169138 A1 20130118; KR 101648609 B1 20160816;
KR 20120049231 A 20120516; PL 2459685 T3 20160129; RU 2012106883 A 20130910; RU 2537177 C2 20141227; TW 201109431 A 20110316;
TW I485238 B 20150521; UA 103406 C2 20131010; US 2012171084 A1 20120705; US 9096808 B2 20150804

DOCDB simple family (application)

EP 2010004338 W 20100716; AU 2010278407 A 20100716; BR 112012001720 A 20100716; CA 2767849 A 20100716;
CN 201080032292 A 20100716; DE 102009035051 A 20090728; EP 10734696 A 20100716; ES 10734696 T 20100716;
HK 12109700 A 20121003; KR 20127001301 A 20100716; PL 10734696 T 20100716; RU 2012106883 A 20100716; TW 99124474 A 20100726;
UA A201201892 A 20100716; US 201013387479 A 20100716