

Title (en)

HIGH-TEMPERATURE FURNACE AND METHOD FOR CONVERTING ORGANIC MATERIALS INTO SYNTHESIS GAS

Title (de)

HOCHTEMPERATUROFEN UND VERFAHREN ZUR UMSETZUNG ORGANISCHER MATERIALIEN IN SYNTHESSEGAS

Title (fr)

FOUR À HAUTE TEMPÉRATURE ET PROCÉDÉ POUR TRANSFORMER DES MATIÈRES ORGANIQUES EN GAZ DE SYNTHÈSE

Publication

EP 2488809 A1 20120822 (DE)

Application

EP 09748062 A 20091015

Priority

EP 2009063481 W 20091015

Abstract (en)

[origin: WO2011044943A1] The invention relates to a high-temperature device (10) for converting a starting material (M), comprising a feed device (30) and a rotationally symmetric furnace pipe (20) having a rotational axis (R). The feed device (30) conducts the starting material (M) into an inner chamber (I) of the furnace pipe (20), and conveying elements (22) are arranged in the inner chamber (I) of the furnace pipe (20) in order to convey the starting material (M) in the direction of an outlet side (A) of the furnace pipe (20). The device (10) comprises an elongated resistance heater (23), which protrudes into the inside (I) of the furnace pipe (20) and which comprises at least one hot zone (H1) and one less hot zone (H2), wherein the hot zone (H1) follows the less hot zone (H2) as viewed from the inlet side (E), and wherein the resistance heater (23) is designed in such a way that a temperature in the inner chamber (I) of the furnace pipe (20) in the range of the hot zone (H1) that is above 1200°C can be achieved.

IPC 8 full level

F27B 7/10 (2006.01); **C10J 3/00** (2006.01); **F23G 5/027** (2006.01); **F27B 7/20** (2006.01); **F27B 7/34** (2006.01); **F27D 11/02** (2006.01)

CPC (source: EP US)

C10J 3/005 (2013.01 - EP US); **F23G 5/0276** (2013.01 - EP US); **F23G 5/20** (2013.01 - EP US); **F23G 7/10** (2013.01 - EP US); **F27B 7/10** (2013.01 - EP US); **F27B 7/2016** (2013.01 - EP US); **F27B 7/34** (2013.01 - EP US); **F27D 11/02** (2013.01 - EP US); **C10J 2200/158** (2013.01 - EP US); **C10J 2300/0916** (2013.01 - EP US); **C10J 2300/0946** (2013.01 - EP US); **C10J 2300/0976** (2013.01 - EP US); **C10J 2300/1276** (2013.01 - EP US); **F23G 2201/304** (2013.01 - EP US); **Y02P 20/145** (2015.11 - EP US)

Citation (search report)

See references of WO 2011044943A1

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)

WO 2011044943 A1 20110421; CA 2777060 A1 20110421; EP 2488809 A1 20120822; US 2012217442 A1 20120830

DOCDB simple family (application)

EP 2009063481 W 20091015; CA 2777060 A 20091015; EP 09748062 A 20091015; US 200913501597 A 20091015