

Title (en)

REACTOR FOR GASIFYING GRANULAR FUELS THAT FORM A FIXED BED

Title (de)

REAKTOR ZUM VERGASEN KÖRNIGER BRENNSTOFFE, DIE EIN FESTBETT BILDEN

Title (fr)

REACTEUR PERMETTANT DE GAZEIFIER DES COMBUSTIBLES EN GRAINS CONSTITUANT UN LIT FIXE

Publication

**EP 1133539 B1 20030129 (DE)**

Application

**EP 99947283 A 19990907**

Priority

- DE 19841586 A 19980911
- EP 9906584 W 19990907

Abstract (en)

[origin: DE19841586A1] The stationary bed fuel gasification reactor comprises a centrifugal separator for solids removal from the product gas. The granular fuel gasification reactor, having a stationary bed (4) through which an oxygen-containing gasifying medium is passed upwardly to produce a product gas of hydrogen and carbon monoxide, has a centrifugal separator for separating solids from the product gas. The separator has an inlet opening (15) for dust-laden product gas, a product gas outlet opening connected to the reactor exhaust channel, and a solids return line (16) leading into the stationary bed. Preferred Features: The centrifugal separator is a cyclone (13). The reactor may have several centrifugal separators, the outlet lines of which lead into an annular chamber which is located at the top of the reactor and which is connected to the exhaust channel. A vertical annular wall is located in the upper portion of the reactor and the separator inlet opening is positioned outside the reactor region enclosed by this wall. The separator may be located outside or inside the region enclosed by the annular wall.

IPC 1-7

**C10J 3/82**; **C10J 3/84**; **C10J 3/02**; **C10J 3/20**

IPC 8 full level

**C10J 3/02** (2006.01); **C10J 3/20** (2006.01); **C10J 3/82** (2006.01); **C10J 3/84** (2006.01)

CPC (source: EP US)

**C10J 3/02** (2013.01 - EP US); **C10J 3/20** (2013.01 - EP US); **C10J 3/42** (2013.01 - EP US); **C10J 3/82** (2013.01 - EP US); **C10J 3/84** (2013.01 - EP US); **C10K 1/00** (2013.01 - EP US); **C10K 1/026** (2013.01 - EP US); **C10J 2200/152** (2013.01 - EP US)

Cited by

DE102009023457B4; WO2010139296A2; DE102009023457A1

Designated contracting state (EPC)

DE ES GB

DOCDB simple family (publication)

**DE 19841586 A1 20000316**; CN 1128201 C 20031119; CN 1290291 A 20010404; DE 59904195 D1 20030306; EP 1133539 A1 20010919; EP 1133539 B1 20030129; ES 2190251 T3 20030716; US 7258841 B1 20070821; WO 0015738 A1 20000323; ZA 995847 B 20010312

DOCDB simple family (application)

**DE 19841586 A 19980911**; CN 99802818 A 19990907; DE 59904195 T 19990907; EP 9906584 W 19990907; EP 99947283 A 19990907; ES 99947283 T 19990907; US 60137799 A 19990907; ZA 995847 A 19990910