

Title (en)

APPARATUS FOR THE PRODUCTION OF PRODUCT GAS FROM A FINELY DIVIDED CARBON CARRIER

Publication

EP 0416242 B1 19921202 (DE)

Application

EP 90113136 A 19900710

Priority

DE 3929766 A 19890907

Abstract (en)

[origin: EP0416242A1] An apparatus for generating a product gas from a finely disperse carbon carrier, in particular fine-grained to dusty coal, by means of pressure gasification has a vertical reactor with the gasification part and a radiant cooling boiler, which reactor carries an upward flow, a vertical convective cooling apparatus with downward flow, and a cooled convecting line between the top of the reactor and the top of the connective cooling apparatus. The reactor has a shaft formed by tubes, a lower molten-slag outlet and an upper, constricted connector piece for the connecting line. It is equipped for cooling the product gas down to adequate solidification of slag particles entrained in the molten form. The convective cooling apparatus is fitted with a bottom take-off for the product gas and for entrained slag particles. The gasification part of the reactor has a lower primary reaction zone and an upper secondary reaction zone. In the region of the secondary reaction zone, the gasification part has radial bulkheads which are cooled with water and leave a central region free. The surface of the bulkheads is provided with pins and coated with a refractory material.

<IMAGE>

IPC 1-7

C10J 3/48; **C10J 3/86**

IPC 8 full level

C10J 3/48 (2006.01); **C10J 3/86** (2006.01)

CPC (source: EP)

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Cited by

EP0722999A1; DE102005041931B4; US6051195A; EP0845522A3; CN109340782A; EP3301143A1; EA029848B1; EP3556828A1; US8083815B2; US8685119B2; US9045706B2; US8308983B2; US8470291B2; WO2013032537A1

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