

Title (en)

GASIFICATION METHOD OF COAL-BEARING RAW MATERIALS, CHAR AND COAL

Title (de)

VERGASUNGSVERFAHREN VON KOHLEHALTIGEN ROHSTOFFEN, HOLZKOHLE UND KOHLE

Title (fr)

PROCÉDÉ DE GAZÉIFICATION DE MATIÈRES PREMIÈRES HOUILLÈRES, DU COKE ET DU CHARBON

Publication

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Application

EP 13461551 A 20131007

Priority

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Abstract (en)

[origin: EP2719747A1] A method of gasification according to the invention characterized by conducting it in a cocurrent system with an advantageously turbulent gas flow in alternating homogeneous 1 and heterogeneous 2 reaction zones with a mixture of steam, hydrocarbon vapours and/or combustible gases, with an oxygen or oxygen with steam injection into the homogeneous reaction zone. Fine-grained, preferably below 2 mm, degassed coal or coal-bearing material, as the feed, is mechanically distributed throughout the heterogeneous reaction zone, preferably with a set of helically fitted shelves, assuring the development of the contact surface of the dissipated solid phase with carbon dioxide and steam. The gas temperature between successive heterogeneous reaction zones is raised to a temperature of no higher than 1000°C via the oxygen or oxygen with steam injection, adjusted for each homogeneous reaction zone, while the gases from the homogeneous reaction zone are given an advantageous rotational motion when passing to the heterogeneous reaction zone.

IPC 8 full level

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