

Title (en)

METHOD FOR THE PARTIAL OXIDATION OF PYROLYTICALLY PRODUCED BREAKDOWN PRODUCTS FOR PRODUCING SYNTHESIS GAS IN A DIRECT-CURRENT REACTOR

Title (de)

VERFAHREN ZUR PARTIALEXIDATION VON PYROLYTISCH ERZEUGTEN SPALTPRODUKTEN ZUR HERSTELLUNG VON SYNTHESEGAS IN EINEM GLEICHSTROMREAKTOR

Title (fr)

PROCÉDÉ POUR L'OXYDATION PARTIELLE DE PRODUITS DE DÉGRADATION GÉNÉRÉS PAR PYROLYSE POUR PRODUIRE UN GAZ DE SYNTHÈSE DANS UN RÉACTEUR À COURANT CONTINU

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Application

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Abstract (en)

[origin: WO2020058093A1] The invention relates to a method for the partial oxidation of pyrolytically produced breakdown products for producing synthesis gas (17) in a direct-current reactor (1) through which solid biomass particles (6) flow, in which synthetic high-carbon substances (32/35) are mixed with the solid biomass particles (6), wherein the solid biomass particles (6) are used in a drying area (2) and in a downstream pyrolysis area (3) as a migratory reaction surface for the pyrolytic breakdown of the synthetic high-carbon substances (32/35), and the oxygen which is chemically bound in the solid biomass particles (6) is at least partially used as an oxidant for the partial oxidation, wherein an additional supply of oxygen-containing gas (7) is carried out in an oxidation area (4), whereby the biomass particles (6) are at least partially converted into fine oxidation residues having an average particle size of less than 1 mm.

IPC 8 full level

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