

Title (en)

METHOD AND DEVICE FOR PRODUCING SYNGAS FROM REACTANTS WHICH CONTAIN CARBON, BY MEANS OF GASIFICATION IN A FLUIDISED BED REACTOR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON SYNTHESEGAS AUS KOHLESTOFFHALTIGEN EDUKTEN DURCH VERGASUNG IM WIRBELSTROMREAKTOR

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR L'ÉLABORATION DE GAZ DE SYNTHÈSE À PARTIR DE SUBSTANCES DE DÉPART CARBONÉES, PAR GAZÉIFICATION DANS UN RÉACTEUR À COURANT TOURBILLONNAIRE

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Application

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Abstract (en)

[origin: WO2012152638A1] To produce syngas from reactants that contain carbon, by means of gasification in a fluidised bed reactor (2), firstly a first, low-lying fluidised bed region (7) of the fluidised bed reactor (2) is heated to a first gasification temperature by an external supply of energy. This low-lying fluidised bed region (7) is received in a first, low-lying fluidised bed housing section (4) of a housing (3) of said fluidised bed reactor (2). The first gasification temperature is below a softening temperature of the reactants or their ash, and heating to this first gasification temperature is carried out using a first heating device (12). A second reactor housing section (5), which is higher than the first fluidised bed region, is heated to a second gasification temperature by an external supply of energy, and heating to this second gasification temperature is carried out using a second heating device (18). The reactants are supplied to the first fluidised bed region (7) by means of a supply device (20), and a discharge device (22) is used to discharge the syngas which has been produced. The invention relates to a resulting method and device for producing syngas from reactants that contain carbon, wherein undesired adhesion is reduced or, as far as possible, completely eliminated at standard gasification efficiency, even when using reactants that have critical softening points.

IPC 8 full level

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Cited by

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