Title (en)
METHOD AND DEVICE FOR PRODUCING LOW-TAR SYNTHESIS GAS FROM BIOMASS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON TEERARMEM SYNTHESEGAS AUS BIOMASSE

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR PRODUIRE DU GAZ DE SYNTHÈSE À FAIBLE TENEUR EN GOUDRONS À PARTIR DE BIOMASSE

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Abstract (en)
[origin: CA2739270A1] Methods for producing synthesis gas from biomass exhibit a high level of tar or require temperatures at which the ash sinters into a glassy mass, thereby rendering it unusable as a mineral fertilizer. The object of the invention is to avoid these disadvantages and to produce a high-quality synthesis gas at a high efficiency. With the method according to the invention, the tar content in the synthesis gas (15a) is lowered in that the biomass (1) is split into pyrolysis coke and pyrolysis gas in a fluidized bed reactor (3), both of which are fed to at least one more fluidized bed reactor (11), wherein tars in the largely tar-free pyrolysis coke are catalytically split at a higher temperature without the ash melting point being exceeded. The method according to the invention enables the production of largely tar-free synthesis gas.

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