

Title (en)
APPARATUS OF CATALYTIC GASIFICATION FOR REFINED BIOMASS FUEL AT LOW TEMPERATURE AND THE METHOD THEREOF

Title (de)
VORRICHTUNG ZUR KATALYTISCHEN VERGASUNG VON RAFFINIERTEM BIOMASSENBRENNSTOFF BEI NIEDRIGER TEMPERATUR UND VERFAHREN DAFÜR

Title (fr)
APPAREIL DE GAZEIFICATION CATALYTIQUE POUR UN COMBUSTIBLE A BIOMASSE RAFFINE A FAIBLE TEMPERATURE, ET SON PROCEDE D'UTILISATION

Publication
EP 1773968 A1 20070418 (EN)

Application
EP 05750463 A 20050614

Priority
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Abstract (en)
[origin: WO2006031011A1] Disclosed is a gasification technique for converting biomass, which is difficult to treat, into clean gas fuel able to be burned in a cogeneration system. The gasification technique includes first stage fluidized-bed catalytic gasification, and second stage gasification of tar and catalytic reforming to convert nitrogen in tar, and HCN in a flammable gas into NH₃, unlike conventional gasification techniques. In addition, since the temperature of a total gasification process is lower than a melting point of ash, powdery ash is generated and thus easily treated. Also, little heat is released due to the low process temperature, and therefore, a compact reactor may be designed to produce gas having a high caloric value. Further, the generated tar is recovered and reused in other processes, and the gas fuel contains a small amount of ammonia.

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