

Title (en)
APPARATUS AND METHODS FOR GASIFICATION

Title (de)
VORRICHTUNG UND VERFAHREN ZUR VERGASUNG

Title (fr)
APPAREIL ET PROCÉDÉS DE GAZÉIFICATION

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Abstract (en)
[origin: WO2014012556A1] The invention relates to a circulating fluidized bed (CFB) reactor for thermal processing of added carbonaceous material, the carbonaceous material normally comprises organic material or organic material mixed with inorganic material such as in straw or other vegetable waste, manure, household rubbish, dried wastewater, dried animal remains or other dried carbonaceous waste products. The invention also relates to a process for manufacturing a combustible product gas having a heating value around 4-8 MJ/Nm³ from such a carbonaceous material by subjecting the carbonaceous material to pyrolysis in one process step and oxidation in two subsequent process steps. A circulating fluidized bed (CFB) reactor according to the invention comprises a primary char gasification chamber (5) and an intermediate char gasification chamber (9) typically provided with a fluidized bed wherein the height (h₁₀) of the second fluidized bed (10) in the intermediate char gasification chamber is larger than the height (h_n) of the first fluidized bed (11) in the primary char gasification chamber (5).

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