

Title (en)

FLUIDIZED BED PROCESS PARTICULARLY FOR COMBUSTION OR GASIFICATION OF UNDRIED ENERGY WOOD FROM THINNING AS WELL AS GREEN BIOMASS

Title (de)

FLIESSBETTVERFAHREN INSbesondere ZUR VERBRENNUNG ODER VERGASUNG VON NICHT TROCKENEM ENERGIEHOLZ AUS DURCHFORSTUNG SOWIE GRÜNER BIOMASSE

Title (fr)

PROCÉDÉ À LIT FLUIDISÉ DESTINÉ EN PARTICULIER À LA COMBUSTION OU À LA GAZÉIFICATION D'ÉNERGIE DE BOIS NON SÉCHÉ À PARTIR DE L'AMINCISSEMENT ET DE LA BIOMASSE VERTE

Publication

EP 3392563 A1 20181024 (EN)

Application

EP 18168199 A 20180419

Priority

FI 20177048 A 20170419

Abstract (en)

In a fluidized bed process, particularly for combustion or gasification of undried logging residues and energy wood from thinning as well as green biomass, readily refinable material, rich in calcium and/or magnesium, is added to the bed material in a content of 30 to 100% of the amount of ash from fuel, in order to bind the halogen and alkali components contained in the fuel, directly or indirectly, to the ash fraction being formed. The process preferably comprises a system for recovering latent heat from water vapour contained in flue gas. The solution enables combustion of fresh undried wood material, particularly rich in chlorine and alkali, in a boiler having a high efficiency and simultaneously a reduced susceptibility to corrosion of the materials used, whereby the degree of utilization, the reliability, as well as the costs for repair and maintenance of the boiler are improved to a substantial extent.

IPC 8 full level

F23C 10/00 (2006.01); **F23G 7/10** (2006.01)

CPC (source: EP FI)

C10J 3/46 (2013.01 - FI); **C10L 10/04** (2013.01 - FI); **F23C 10/002** (2013.01 - EP); **F23C 10/30** (2013.01 - FI); **F23G 7/10** (2013.01 - EP);
F23G 7/105 (2013.01 - EP); **F23G 2203/50** (2013.01 - EP); **F23G 2206/00** (2013.01 - EP); **F23G 2207/107** (2013.01 - EP);
F23G 2209/261 (2013.01 - EP); **F23J 2215/30** (2013.01 - EP)

Citation (search report)

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US11939547B2

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