

Title (en)

APPARATUS FOR SEPARATING FOULING CONTAMINANTS FROM NON-CONDENSABLE GASES AT THE END OF A PYROLYSIS/THERMOLYSIS OF BIOMASS PROCESS

Title (de)

VORRICHTUNG ZUR ABTRENNUNG VON FOULING-VERUNREINIGUNGEN AUS NICHTKONDENSIERBAREN GASEN AM ENDE EINES VERFAHRENS ZUR PYROLYSE/THERMOLYSE VON BIOMASSE

Title (fr)

APPAREIL POUR SEPARER LES CONTAMINANTS SALISSANTS DES GAZ NON CONDENSABLES AU TERME D'UNE PYROLYSE / THERMOLYSE D'UN PROCESSUS DE BIOMASSE

Publication

EP 1848521 A1 20071031 (EN)

Application

EP 05714445 A 20050216

Priority

CA 2005000196 W 20050216

Abstract (en)

[origin: WO2006086867A1] A method of continuously capturing BioOil and its constituents from a gas stream produced in a fast pyrolysis/thermolysis process, in a usable liquid form so as to produce a non-condensable gas free of fouling contaminants. The method includes separating BioOil and its constituents from a gas stream using hot inertial separation to maintain the temperature of said BioOil and its constituents above a temperature at which the thick and/or sticky constituents cause inefficient operation of the equipment but low enough so that they do not undergo rapid degradation. Next the gas velocity is reduced to a temperature sufficiently low to allow droplets in the gas stream to settle out but high enough so that a viscosity of said droplets remains low enough to avoid inefficient operation of the separation equipment. Finally, liquid is condensed out of the gas stream.

IPC 8 full level

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CPC (source: EP)

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