

Title (en)

METHOD FOR TREATING POSSIBLY CONTAMINATED BIOLOGICAL MATERIAL PRIOR TO A PYROLYSIS PROCESS

Title (de)

VERFAHREN ZUR BEHANDLUNG VON MÖGLICHERWEISE KONTAMINIERTEM BIOLOGISCHEM MATERIAL VOR EINEM PYROLYSEVERFAHREN

Title (fr)

PROCEDE DE TRAITEMENT D'UNE MATIERE BIOLOGIQUE EVENTUELLEMENT CONTAMINEE AVANT UN PROCEDE DE PYROLYSE

Publication

EP 1385921 A1 20040204 (EN)

Application

EP 01921408 A 20010402

Priority

FI 0100302 W 20010402

Abstract (en)

[origin: WO02079345A1] The present invention concerns a method for treating possibly contaminated biological material prior to a pyrolysis process (11), comprising removing of free water in a preheating step (1) at a temperature < 100 DEG C and then all bound water in a heating step (6) at a temperature from about 100 DEG C to about 200 DEG C. The invention is characterized in that all water vapour formed is condensed, received condensed water is subjected to electro flotation (3, 8), whereby formed flock is separated from the water and returned to said preheating step (1) and the water thus received is further led through an activated carbon filter (5, 10) in order to receive absolutely clean water (W1, W2). The used activated carbon is returned to the preheating stage (1), and the remaining, absolutely dry biological material from the heating stage (6) is subjected to a pyrolysis process (11) in absence of oxygen at a temperature of above 700 DEG C.

IPC 1-7

C10B 53/00; **F23G 1/00**; **C10B 57/00**

IPC 8 full level

A61L 2/00 (2006.01); **A61L 11/00** (2006.01); **C02F 1/02** (2006.01); **C02F 11/10** (2006.01); **C10B 53/00** (2006.01); **C02F 1/28** (2006.01); **C02F 1/465** (2006.01)

CPC (source: EP)

A61L 2/0023 (2013.01); **A61L 11/00** (2013.01); **C02F 1/025** (2013.01); **C02F 11/10** (2013.01); **C10B 53/00** (2013.01); **C02F 1/283** (2013.01); **C02F 1/465** (2013.01); **C02F 2103/22** (2013.01); **C02F 2303/04** (2013.01); **Y02W 10/40** (2015.05)

Citation (search report)

See references of WO 02079345A1

Cited by

CN112111292A; CN108913175A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02079345 A1 20021010; EP 1385921 A1 20040204

DOCDB simple family (application)

FI 0100302 W 20010402; EP 01921408 A 20010402