

Title (en)  
METHOD FOR OBTAINING FUELS FROM VEGETAL AND ANIMAL FAT WASTE AND INSTALLATION FOR CARRYING OUT SAID METHOD

Title (de)  
VERFAHREN ZUR GEWINNUNG VON BRENNSTOFFEN AUS PFLANZLICHEN UND TIERISCHEN FETTABFÄLLEN SOWIE ANLAGE ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)  
PROCÉDÉ DE PRODUCTION DE COMBUSTIBLES À PARTIR DE DÉCHETS GRAS VÉGÉTAUX ET ANIMAUX, ET INSTALLATION DESTINÉE À LA MISE EN OEUVRE DE CE PROCÉDÉ

Publication  
**EP 1976961 A1 20081008 (DE)**

Application  
**EP 06805989 A 20061002**

Priority

- EP 2006009544 W 20061002
- DE 102006003328 A 20060123
- DE 102006019763 A 20060428

Abstract (en)  
[origin: DE102006019763A1] The production of fuels based on vegetable and/or animal fat waste containing fats and/or free fatty acids comprises reacting the free fatty acid contained in the fat waste with at least a multivalent alcohol in the absence of enzymatic and solid neutral catalysts at greater than 220[deg]C, such that the esterification of free fatty acid takes place. Independent claims are also included for the following: (1) a fuel, based on vegetable and/or animal fats containing free fatty acids, obtained from the above process; and (2) a plant, for carrying out the production of fuel, in which a sequence of procedure steps is carried out, comprising a treatment unit (1), for the physical treatment of vegetable and/or animal fat waste, comprising a device for the physical separation of water, particularly a decantation device and/or a device, for the separation of solids, such as a filter and/or filter device, optionally a buffer tank (2) that is in a production line downstream to the treatment unit, for the uptake and/or temporary storage of the physically-treated fat waste from the treatment unit, a reactor unit (3), for the execution of an esterification reaction of the physically-treated fat waste from the treatment unit and/or for supplying the physically prepared fat waste to the buffer tank, where the reactor unit: is particularly in the form of an agitation reactor with agitation components for the mixing of the reaction mixture, is heatable over a heating medium (5) and is supplied with an alcohol that is useful for the esterification process from a storage tank (4) and with physically-treated fat waste, preferably as a separate educt stream, from the treatment unit and/or from the optionally available buffer tank, and optionally an intermediate tank (7) for the uptake and/or temporary storage, particularly for the cooling of raw product mixture from the reactor unit, where the intermediate tank is linked with a heating medium (8), particularly a heat exchanger, for the dissipation of heat and its feedback into the reactor unit.

IPC 8 full level  
**C10L 1/02** (2006.01)

CPC (source: EP US)  
**C10L 1/02** (2013.01 - EP US)

Citation (search report)  
See references of WO 2007087838A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**DE 102006019763 A1 20070802; DE 102006019763 B4 20090409**; CA 2637799 A1 20070809; EP 1976961 A1 20081008; JP 2009523866 A 20090625; US 2010058652 A1 20100311; WO 2007087838 A1 20070809

DOCDB simple family (application)  
**DE 102006019763 A 20060428**; CA 2637799 A 20061002; EP 06805989 A 20061002; EP 2006009544 W 20061002; JP 2008550641 A 20061002; US 16186106 A 20061002