Title (en)

PROCESS FOR PREPARING FATTY ACID ESTERS OF SHORT-CHAIN MONOHYDRIC ALCOHOLS.

Title (de)

VERFAHREN ZUR HERSTELLUNG VON FETTSÄUREESTERN KURZKETTIGER EINWERTIGER ALKOHOLE.

Title (fr)

PROCEDE DE PREPARATION D'ESTERS D'ACIDES GRAS D'ALCOOLS MONOVALENTS A COURTE CHAINE.

Publication

EP 0658183 A1 19950621 (DE)

Application

EP 92922141 A 19921103

Priority

- AT 9200136 W 19921103
- AT 220091 A 19911106

Abstract (en)

[origin: WO9309212A1] A process is disclosed for preparing fatty acid esters of short-chain monohydric aliphatic alcohols or monoalkylated diols by basically catalyzed esterification of natural, partially or totally synthetic fatty acid glycerides, as well as fatty acid glyceride-based waste products, such as used frying oils. The process is characterized in that the unpurified fatty acid glycerides, containing in particular high proportions of free fatty acids and phosphatides, (a) are esterified in one or several steps in the presence of a basic catalyst with an excess of short-chain alcohol or monoalkylated diol; (b) the glycerin phase produced after the first esterification step is at least partially added to the second or following step, after sterification has been carried out, and the mixture is stirred; (c) the glycerin phase is again separated, the supernatant fatty acid ester is cleared of excess alcohol or diol, then treated with a possibly diluted organic or anorganic acid, and if necessary filtered. This process, that is carried out without pressure and heat supply, is characterized by a technically simple implementation by means of simple equipment, and by a high degree of purity of the thus obtained fatty acid esters.

IPC 1-7

C11C 3/04

IPC 8 full level

C11C 3/04 (2006.01)

CPC (source: EP US)

C11C 3/04 (2013.01 - EP US)

Citation (search report)

See references of WO 9309212A1

Cited by

WO2014125223A1; US8692008B2; WO2020074435A1; WO2012054946A1; WO2014135769A2; US9018425B2; WO2021204610A1; US12031107B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR IT LI SE

DOCDB simple family (publication)

WO 9309212 A1 19930513; AT 397510 B 19940425; AT A220091 A 19921115; AT E150074 T1 19970315; AU 2880992 A 19930607; CA 2122713 A1 19930513; CZ 111694 A3 19950215; DE 59208211 D1 19970417; EP 0658183 A1 19950621; EP 0658183 B1 19970312; HU 212123 B 19960228; HU 9401330 D0 19940829; HU T66403 A 19941128; US 5434279 A 19950718

DOCDB simple family (application)

AT 9200136 W 19921103; AT 220091 A 19911106; AT 92922141 T 19921103; AU 2880992 A 19921103; CA 2122713 A 19921103; CZ 111694 A 19921103; DE 59208211 T 19921103; EP 92922141 A 19921103; HU 9401330 A 19921103; US 23228594 A 19940506