Title (en)

METHOD FOR REMOVING IMPURITIES FROM FATTY ACID METHYL ESTERS BASED ON NATURAL FATS AND OILS

Title (de)

VERFAHREN ZUR ENTFERNUNG VON VERUNREINIGUNGEN AUS FETTSÄUREMETHYLESTERN AUF BASIS NATÜRLICHER FETTE UND ÖLE

Title (fr)

PROCÉDÉ POUR ÉLIMINER DES IMPURETÉS CONTENUES DANS DES ESTERS MÉTHYLIQUES D'ACIDES GRAS À BASE D'HUILES ET DE GRAISSES NATURELLES

Publication

EP 1966355 A2 20080910 (DE)

Application

EP 06829383 A 20061207

Priority

• EP 2006011763 W 20061207
• DE 102005059002 A 20051208

Abstract (en)

[origin: WO2007065679A2] The invention relates to a method for removing impurities from fatty acid methyl esters based on natural fats and oils, especially for separating glycerine and traces of alkali metal compounds. As a result of the disadvantages of prior art, the aim of the invention is to produce a method by which means impurities such as glycerine and traces of alkali metal compounds are approximately completely removed from fatty acid methyl esters based on natural fats and oils, with relatively simple means. To this end: a) the FAME raw product is treated with a neutralisation means that is insoluble in the raw product in order to remove the transesterification catalyst, b) methanol is then removed by distillation, and c) the methanol-free FAME raw product is brought into contact at least once with phosphorylated and carbamated starch phosphate particles, the glycerine contained in the FAME raw product being absorbed by the starch phosphate particles. The cited starch phosphate particles can absorb up to ten times the quantity of their own weight in glycerine from biodiesel and therefore achieve a maximum residual content of glycerine of 0.02 %.

IPC 8 full level

C10L 1/02 (2006.01); C11B 3/10 (2006.01)

CPC (source: EP)

C10L 1/026 (2013.01); C11C 3/003 (2013.01); Y02E 50/10 (2013.01)

Citation (search report)

See references of WO 2007065679A2

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

DOCDB simple family (publication)

DE 102005059002 A1 20070614; EP 1966355 A2 20080910; WO 2007065679 A2 20070614; WO 2007065679 A3 20070726

DOCDB simple family (application)

DE 102005059002 A 20051208; EP 06829383 A 20061207; EP 2006011763 W 20061207