

Title (en)
PROCESS FOR RECOVERY OF PLANT STEROLS FROM BY-PRODUCT OF VEGETABLE OIL REFINING

Title (de)
VERFAHREN ZUR TRENNUNG PFLANZLICHER STEROLE VON BEI DER RAFFINATION PFLANZLICHER ÖLE ANFALLENDEN BEIPRODUKTEN

Title (fr)
PROCEDE POUR EXTRAIRE LES STEROLS DE NATURE VEGETALE CONTENUS DANS DES SOUS-PRODUITS DE RAFFINAGE D'HUILES VEGETALES

Publication
EP 1520003 B8 20071107 (EN)

Application
EP 02755376 A 20020702

Priority

- HU 0200062 W 20020702
- HU P0202024 A 20020619

Abstract (en)
[origin: WO2004000979A1] The process for recovery of plant sterols and tocopherols from deodorization distillates formed during chemical or physical refining of vegetable oils consists of the following steps: free fatty acids are removed from the deodorization distillate by vacuum distillation or by continuation solvent saponification, after the removal of free fatty acids, the received material is reacted with an aromatic carboxylic acid anhydride at a temperature of 50-150 DEG C, under reduced pressure, after the treatment with anhydride, tocopherols are removed from the mixture, and crystalline free sterols are recovered from the distillation residue containing sterol esters, di- and triglycerides by transesterification.

IPC 8 full level
C11B 3/00 (2006.01); **C11B 7/00** (2006.01)

CPC (source: EP US)
A61P 3/06 (2017.12 - EP); **C11B 3/12** (2013.01 - EP US); **C11C 3/10** (2013.01 - EP US)

Designated contracting state (EPC)
CZ SK

Designated extension state (EPC)
RO SI

DOCDB simple family (publication)
WO 2004000979 A1 20031231; AU 2002321664 A1 20040106; BR 0215782 A 20050301; CA 2501963 A1 20031231; CN 100374534 C 20080312; CN 1732251 A 20060208; EA 200500051 A1 20051027; EP 1520003 A1 20050406; EP 1520003 B1 20070425; EP 1520003 B8 20071107; HR P20050052 A2 20050831; HU 0202024 D0 20020828; HU 226074 B1 20080428; HU P0202024 A2 20040329; JP 2005530018 A 20051006; JP 4180052 B2 20081112; MX PA04012787 A 20050920; UA 78066 C2 20070215; US 2006135794 A1 20060622; US 7368583 B2 20080506

DOCDB simple family (application)
HU 0200062 W 20020702; AU 2002321664 A 20020702; BR 0215782 A 20020702; CA 2501963 A 20020702; CN 02829395 A 20020702; EA 200500051 A 20020702; EP 02755376 A 20020702; HR P20050052 A 20050119; HU P0202024 A 20020619; JP 2004515075 A 20020702; MX PA04012787 A 20020702; UA 2005000511 A 20020702; US 51976905 A 20050624