Title (en)

Fat refining

Title (de)

Raffinieren von Fetten

Title (fr)

Procédé de raffinage de corps gras

Publication

EP 0979860 A1 20000216 (FR)

Application

EP 98202698 A 19980811

Priority

EP 98202698 A 19980811

Abstract (en)

Refining of fats, especially coffee oil, millet oil or rice bran oil to remove free fatty acids comprises the controlled neutralization in an aqueous medium at above the melting point of the fat. A process for refining fatty materials, especially oils, selectively to remove the free fatty acids present, is by controlled neutralization at a temperature above the melting point of the fatty material, in an aqueous medium containing an alcohol or a polyol, with gradual addition of a base to the reaction medium to maintain a pH of 9-11 and to cause partition of the free fatty acid between the lipidic phase and the aqueous phase containing the alcohol or polyol, which is immiscible with the lipidic phase, so that soaps are formed which become solubilized in the aqueous phase to cause displacement of the equilibrium and progressive deacidification of the lipidic phase until the pH is stabilized, at which point the two phases are separated and the deacidified lipidic phase is recovered.

Abstract (fr)

Le procédé de raffinage de corps gras pour en séparer sélectivement et quantitativement les acides gras libres consiste à combiner l'extraction par un alcool ou un polyol et la neutralisation par un alcali à pH contrôlé de 9 à 11.

IPC 1-7 (main, further and additional classification)

C11B 3/06

IPC 8 full level (invention and additional information)

C11B 3/06 (2006.01)

CPC (invention and additional information)

C11B 3/06 (2013.01)

Citation (search report)

- [X] GB 596871 A 19480113 - HERBERT K ALLBRIGHT
- [DA] FR 2321537 A1 19770318 - REWO CHEMISCHE WERKE GMBH [DE]
- [A] US 3008972 A 19611114 - MITSUO MITANI
- [A] US 2844613 A 19580722 - COUSINS EDWIN R, et al

- [A] DATABASE WPI Section Ch Week 9305, Derwent World Patents Index; Class D23, AN 93-042669, XP002089833
- [A] A.C. BHATTACHARYYA ET AL.: "Edible quality rice bran oil from high FFA rice bran oil by miscella refining", JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY, vol. 63, no. 9, 1986, CHAMPAIGN US, pages 1189 - 1191, XP002089832
- [A] DATABASE WPI Section Ch Week 9351, Derwent World Patents Index; Class D14, AN 93-408922, XP002089834
- [A] DATABASE WPI Section Ch Week 7551, Derwent World Patents Index; Class D23, AN 75-83956W, XP002089835

Designated contracting state (EPC)

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

DOCDB simple family

EP 0979860 A1 20000216; EP 0979860 B1 20031112; AT 254161 T 20031115; AU 5413799 A 20000306; AU 752423 B2 20020919; CA 2335070 A1 20000224; DE 69819708 D1 20031218; DE 69819708 T2 20040923; ES 2210660 T3 20040701; JP 2002522627 A 20020723; US 2001005759 A1 20010628; US 6506916 B2 20030114; WO 0009637 A1 20000224