Title (en)
PROCESS TO RE-REFINE USED OILS

Title (de)
Verfahren zur Wiederaufbereitung von Altöl

Title (fr)
PROCEDE DE RERAFFINAGE D'HUILES USEES

Publication
EP 0618959 B1 19990512 (EN)

Application
EP 93921862 A 19930928

Priority
• EP 9302628 W 19930928
• IT MI922271 A 19920930

Abstract (en)
[origin: WO9407798A1] Process to re-refine used oils, wherein the oils (A1) are initially subjected to a pretreatment (A) with a basic reagent (A2), then to a first preflash treatment (B) to eliminate the water (B1) and the most volatile fractions (B2) contained therein, and finally to a combined treatment (C) of fractional distillation and of purification to eliminate the high polymers and heavy metals, carried out into a single filled-type column (21), in order to obtain one or more fractions of re-refined oils (C3). The separation of the high polymers and heavy metals takes place, together with a cut of very heavy and viscous oils, from the bottom of the column (21) by means of a cyclone device (23). The re-refined oils (C3) are then subjected to a suitable decolorization treatment (D) and can be used as base oils for the production of lubrification oils.

IPC 1-7
C10M 175/00; C10G 53/12; C10G 67/10

IPC 8 full level
C10G 53/12 (2006.01); **C10G 67/10** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP)
C10M 175/00 (2013.01); **C10M 175/0008** (2013.01); **C10M 175/0016** (2013.01); **C10M 175/0025** (2013.01); **C10M 175/0033** (2013.01)

Cited by
CN102226101A; EP3392328A1; IT201700042853A1; EP3098290A1; EP3098291A1

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9407798 A1 19940414; AT E180009 T1 19990515; CN 1040995 C 19981202; CN 1086252 A 19940504; CZ 157994 A3 19941215; CZ 287418 B6 20001115; DE 69324905 D1 19990617; DE 69324905 T2 19991111; DK 0618959 T3 19991129; EG 20181 A 19970930; EP 0618959 A1 19941012; EP 0618959 B1 19990512; ES 2132258 T3 19990816; GR 3030648 T3 19991029; HK 1013280 A1 19990820; HU 213650 B 19970929; HU 9401725 D0 19940928; HU T68935 A 19950828; IT 1255534 B 19951109; IT MI922271 A0 19920930; IT MI922271 A1 19940330; PL 171473 B1 19970530; PL 297417 A1 19940405; RU 2099397 C1 19971220; SA 95150447 A 20051203; SA 95150447 B1 20060208; TJ 335 B 20020701

DOCDB simple family (application)
EP 9302628 W 19930928; AT 93921862 T 19930928; CN 93118174 A 19930929; CZ 157994 A 19930928; DE 69324905 T 19930928; DK 93921862 T 19930928; EG 62393 A 19930926; EP 93921862 A 19930928; ES 93921862 T 19930928; GR 990401734 T 19990630; HK 98114602 A 19981222; HU 9401725 A 19930928; IT MI922271 A 19920930; PL 29741793 A 19930114; RU 94028710 A 19940527; SA 95150447 A 19950117; TJ 96000355 A 19930928