

Title (en)

METHOD FOR HIGH-TEMPERATURE DISTILLATION OF RESIDUAL OIL IN A LIMITED TIME

Title (de)

VERFAHREN ZUR HOCHTEMPERATUR-KURZZEIT-DESTILLATION VON RÜCKSTANDSÖL

Title (fr)

PROCEDE DE DISTILLATION A HAUTE TEMPERATURE EN UN TEMPS LIMITE D'HUILE RESIDUELLE

Publication

EP 1590423 B1 20070221 (DE)

Application

EP 03813544 A 20030709

Priority

- EP 0307377 W 20030709
- DE 10259450 A 20021219

Abstract (en)

[origin: WO2004056942A1] The invention relates to a method for a high-temperature distillation of residual oil in a limited time. The inventive method is improved by a technically simple recovery of a small residual fraction from a gas and/or oil vapour mixture produced by a mixing unit (1). Said small residual fraction contains large quantity of undesirable polluting catalytic substances (CCR, Ni, V, asphaltenes). For this purpose, the gas and/or oil vapour mixture produced by the mixing unit (1) is dissolved with gas or water vapour in a tower (17) at a temperature of 450 DEG C in such a way that a high-boiling point fraction which has a high content of the pollutant substances and whose initial boiling point is higher than 450 DEG C is condensed and extracted. Another improvement of the method consists in introducing a non-condensed oil produced in the tower (17) into a fractionating tower (19) where said oil is decomposed in order to produce a depressurised diesel fraction having a low content of the polluting substances and a gasoline/diesel fraction.

IPC 8 full level

C10G 9/28 (2006.01); **C10G 70/04** (2006.01)

CPC (source: EP US)

C10G 9/28 (2013.01 - EP US); **C10G 70/043** (2013.01 - EP US); **C10G 2300/107** (2013.01 - EP US); **C10G 2300/1077** (2013.01 - EP US); **C10G 2300/301** (2013.01 - EP US); **C10G 2400/02** (2013.01 - EP US); **C10G 2400/06** (2013.01 - EP US)

Designated contracting state (EPC)

AT DE ES FR GB NL

DOCDB simple family (publication)

WO 2004056942 A1 20040708; AT E354625 T1 20070315; AU 2003250003 A1 20040714; AU 2003250003 B2 20061221; CA 2511156 A1 20040708; CA 2511156 C 20120403; DE 10259450 A1 20040715; DE 10259450 B4 20060810; DE 50306611 D1 20070405; EP 1590423 A1 20051102; EP 1590423 B1 20070221; ES 2282737 T3 20071016; JP 2006510757 A 20060330; JP 4365788 B2 20091118; MX PA05006696 A 20060330; US 2006138030 A1 20060629; US 7507330 B2 20090324

DOCDB simple family (application)

EP 0307377 W 20030709; AT 03813544 T 20030709; AU 2003250003 A 20030709; CA 2511156 A 20030709; DE 10259450 A 20021219; DE 50306611 T 20030709; EP 03813544 A 20030709; ES 03813544 T 20030709; JP 2004561124 A 20030709; MX PA05006696 A 20030709; US 53971503 A 20030709