

Title (en)

IMPROVED METHOD FOR DEEP HYDROCONVERSION BY EXTRACTING AROMATICS AND RESINS WITH RECOVERY OF THE HYDROCONVERSION EXTRACT AND THE RAFFINATE IN THE DOWNSTREAM UNITS

Title (de)

VERBESSERTES VERFAHREN DER TIEFEN HYDROKONVERSION ANHAND EINER EXTRAKTION VON AROMASTOFFEN UND HARZEN MIT VALORISIERUNG DES HYDROKONVERSIONS-EXTRAKTS UND DES RAFFINATS BEI DEN NACHGESCHALTETEN EINHEITEN

Title (fr)

PROCEDE AMELIORE D'HYDROCONVERSION PROFONDE AU MOYEN D'UNE EXTRACTION DES AROMATIQUES ET RESINES AVEC VALORISATION DE L'EXTRAIT A L'HYDROCONVERSION ET DU RAFFINAT AUX UNITES AVAL

Publication

EP 3260520 B1 20191009 (FR)

Application

EP 17176996 A 20170620

Priority

FR 1655845 A 20160623

Abstract (en)

[origin: CN107541290A] The invention relates to a method for a deep hydroconversion process using an extraction of aromatics and resins, with upgrading of the hydroconversion extract and raffinate in downstream units. The method includes the following steps: a) ebullated bed hydroconversion of a feed in the presence of hydrogen during hydroconversion; b) atmospheric fractionation of at least a hydroconverted effluent obtained from the step a) to produce a fraction containing a gasoline fraction and a gas fraction and atmospheric residues; c) vacuum fractionation of at least a portion of the atmospheric residues obtained from the step b) to obtain a vacuum gas oil fraction and an unconverted vacuum residue fraction; d) deasphalting of at least a portion of the unconverted vacuum residue fraction obtained from the step c); and e) liquid/liquid extraction on a hydrocarbon fraction of depleted asphaltenes to produce an extract enriched in aromatics and resins and an extract depleted in aromatics and resins, at least a portion of the extract sent to an inlet of the hydroconversion as an aromatic diluent.

IPC 8 full level

C10G 67/04 (2006.01); **C10G 7/00** (2006.01); **C10G 7/06** (2006.01); **C10G 21/00** (2006.01); **C10G 21/06** (2006.01)

CPC (source: EP US)

C10G 7/00 (2013.01 - EP US); **C10G 7/06** (2013.01 - EP US); **C10G 21/003** (2013.01 - EP US); **C10G 21/06** (2013.01 - EP US); **C10G 65/12** (2013.01 - EP US); **C10G 67/04** (2013.01 - EP US); **C10G 67/0409** (2013.01 - EP US); **C10G 67/049** (2013.01 - EP US); **C10G 69/04** (2013.01 - EP US); **C10G 2300/1096** (2013.01 - EP US); **C10G 2300/44** (2013.01 - EP US)

Cited by

CN108950229A; FR3102772A1; FR3101637A1; CN114555760A; FR3098522A1; WO2021089477A1; WO2021069330A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3260520 A1 20171227; **EP 3260520 B1 20191009**; CN 107541290 A 20180105; CN 107541290 B 20220412; FR 3053047 A1 20171229; FR 3053047 B1 20180727; RU 2017121798 A 20181221; US 2017369796 A1 20171228

DOCDB simple family (application)

EP 17176996 A 20170620; CN 201710480027 A 20170622; FR 1655845 A 20160623; RU 2017121798 A 20170621; US 201715631197 A 20170623