

Title (en)

METHOD FOR CONVERTING HEAVY HYDROCARBON FEEDSTOCKS WITH RECYCLING OF A DEASPHALTED OIL

Title (de)

VERFAHREN ZUR UMWANDLUNG VON SCHWEREN KOHLENWASSERSTOFFEINSÄTZEN MIT RECYCLING EINES ENTASPHALTIERTEN ÖLS

Title (fr)

PROCÉDÉ DE CONVERSION DE CHARGES LOURDES D'HYDROCARBURES AVEC RECYCLAGE D'UNE HUILE DÉSASPHALTÉE

Publication

**EP 3728518 B1 20220518 (FR)**

Application

**EP 18814904 A 20181207**

Priority

- FR 1762868 A 20171221
- EP 2018084052 W 20181207

Abstract (en)

[origin: WO2019121073A1] The invention concerns a method for converting a heavy hydrocarbon feedstock containing a fraction of at least 50% having a boiling temperature of at least 300°C and containing sulfur, Conradson carbon, metals and nitrogen, comprising at least two successive hydroconversion steps, that may be separated by an intermediate separation step, and at least one step of deasphalting a heavy fraction of the effluent from the hydroconversion, at least part of the deasphalted oil (DAO) being recycled during the hydroconversion, downstream from the first hydroconversion step. The DAO is either recycled upon exiting the deasphalter, or after having undergone a fractionation step producing a heavy fraction of the DAO that then constitutes the recycled part of the DAO. This method helps simultaneously improve the level of conversion and the stability of the liquid effluents.

IPC 8 full level

**C10G 45/08** (2006.01); **C10G 65/04** (2006.01)

CPC (source: EP US)

**C10G 21/003** (2013.01 - EP US); **C10G 45/08** (2013.01 - EP US); **C10G 45/16** (2013.01 - US); **C10G 45/22** (2013.01 - EP);  
**C10G 65/04** (2013.01 - EP); **C10G 67/0463** (2013.01 - EP US); **C10G 2300/1077** (2013.01 - EP US); **C10G 2300/202** (2013.01 - EP US);  
**C10G 2300/206** (2013.01 - EP US); **C10G 2300/301** (2013.01 - US); **C10G 2300/4006** (2013.01 - US); **C10G 2300/4012** (2013.01 - US);  
**C10G 2300/4018** (2013.01 - US); **C10G 2300/4081** (2013.01 - US); **C10G 2300/44** (2013.01 - US)

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)

**WO 2019121073 A1 20190627**; CN 111819268 A 20201023; CN 111819268 B 20221213; EP 3728518 A1 20201028; EP 3728518 B1 20220518;  
ES 2923131 T3 20220923; FR 3075809 A1 20190628; FR 3075809 B1 20200911; PL 3728518 T3 20220926; PT 3728518 T 20220722;  
RU 2020123948 A 20220121; RU 2020123948 A3 20220121; SA 520412257 B1 20230305; US 11149217 B2 20211019;  
US 2020339894 A1 20201029

DOCDB simple family (application)

**EP 2018084052 W 20181207**; CN 201880090040 A 20181207; EP 18814904 A 20181207; ES 18814904 T 20181207; FR 1762868 A 20171221;  
PL 18814904 T 20181207; PT 18814904 T 20181207; RU 2020123948 A 20181207; SA 520412257 A 20200618; US 201816957078 A 20181207