

Title (en)

# PROCESS FOR THE HYDROCONVERSION OF HEAVY AND RESIDUAL OILS

Publication

**EP 0263522 B1 19930915 (DE)**

Application

**EP 87114725 A 19871008**

Priority

DE 3634275 A 19861008

Abstract (en)

[origin: EP0516187A2] The invention relates to a process for the hydroconversion of heavy and residual oils, spent oils and waste oils, tar sands and the like by contacting with hydrogen at a hydrogen partial pressure between 50 and 300 bar, a temperature between 250 and 500 DEG C, a throughput of 0.1 to 5 tonnes/m<3> and hour, and a gas/liquid ratio between 100 and 10,000 standard m<3>/tonne. The technical object and aim of the invention is to provide a process for processing heavy and residual oils, wherein excessive foam formation is avoided and the reaction space of the hydrogenation reactors is more fully utilised. To achieve the technical object, the catalyst or added additives in the hydrotreatment of the feedstocks has a particle size distribution between 0.1 and 2000 mu m, preferably 0.1 and 1000 mu m, and the fraction of the particles of catalyst or additive having a particle size of 100 mu m or more amount to between 10 and 40% by weight, preferably 10 or 30% by weight, of the total quantity of catalyst or additive added to the reactor system.

IPC 1-7

**C10G 1/08; C10G 47/26**

IPC 8 full level

**C10G 1/00** (2006.01); **C10C 1/20** (2006.01); **C10G 1/08** (2006.01); **C10G 47/02** (2006.01); **C10G 47/26** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP US)

**C10C 1/205** (2013.01 - EP US); **C10G 1/086** (2013.01 - EP US); **C10G 47/26** (2013.01 - EP US); **C10M 175/0041** (2013.01 - EP US)

Cited by

EP0314992A3; EP0330757A3; FR3090686A1; BE1026831B1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0263522 A2 19880413; EP 0263522 A3 19890412; EP 0263522 B1 19930915;** AT E128174 T1 19951015; CA 1302332 C 19920602; DE 3634275 A1 19880428; DE 3751534 D1 19951026; DE 3787434 D1 19931021; EP 0516187 A2 19921202; EP 0516187 A3 19921209; EP 0516187 B1 19950920; ES 2043629 T3 19940101; ES 2078610 T3 19951216; JP H0696710 B2 19941130; JP S63146989 A 19880618; NO 171219 B 19921102; NO 171219 C 19930210; NO 874205 D0 19871007; NO 874205 L 19880411; US 4851107 A 19890725

DOCDB simple family (application)

**EP 87114725 A 19871008;** AT 92112758 T 19871008; CA 548819 A 19871007; DE 3634275 A 19861008; DE 3751534 T 19871008; DE 3787434 T 19871008; EP 92112758 A 19871008; ES 87114725 T 19871008; ES 92112758 T 19871008; JP 25264487 A 19871008; NO 874205 A 19871007; US 10529087 A 19871007