

Title (en)

ZEOLITE ZSM-48 CATALYST AND METHOD FOR IMPROVING PARAFFINIC FEEDSTOCK FLOW POINT

Title (de)

KATALYSATOR AUF DER BASIS VON ZEOLITH ZSM-48 UND VERFAHREN ZUR VERBESSERUNG DES STOCKPUNKTES VON PARAFFINISCHEN EINSÄTZEN

Title (fr)

CATALYSEUR A BASE DE ZEOLITHE ZSM-48 ET PROCEDE POUR L'AMELIORATION DU POINT D'ECOULEMENT DE CHARGES PARAFFINIQUES

Publication

EP 1265705 A1 20021218 (FR)

Application

EP 01911825 A 20010302

Priority

- FR 0100617 W 20010302
- FR 0002803 A 20000302

Abstract (en)

[origin: FR2805762A1] The catalyst contains at least one noble metal from group VIII and at least one zeolite from ZSM-48, EU-2, EU11 and ZBM-30. An Independent claim is also included for the preparation of the above catalyst, comprising mixing the matrix and the zeolite and extruding them, depositing part of the noble metal on the zeolite in the support using a solution containing at least one cationic complex of the metal, and heat treating the coated support Preferred Process: At least part of the noble metal is deposited on the zeolite in a support comprising at least one matrix and at least one of the zeolites. At least part of the noble metal is deposited on the surface of the zeolite, and part (less than 10%) is localized on the matrix. Alternatively, the noble metal is deposited on or mixed in with the matrix. The noble metal is palladium, platinum, iridium or rhodium and the same or different metals are used on the matrix and the zeolite. An additional preparation stage (b') places the rest of the noble metal on the matrix by contact with a solution containing at least one anionic complex of the metal. This stage (b') can be before or after (b) and the catalyst can be heat treated before (b). The noble metal is deposited directly on the powdered zeolite before being mixed with the matrix. Treatment of hydrocarbons using a catalyst as described above to reduce the flowpoint of hydrocarbons loads. Specifically, the process with a paraffin load with an initial boiling point above 175 deg C, a concentration of nitrogenated components of less than 200 ppm, a sulfur content of less than 1000 ppm and a metal content of less than 50 ppm, operates at 170-500 deg C and 1-250 bars, with a volumetric speed of 0.05-100 per hour in the presence of 50- 2000 liters of hydrogen/liter of charge.

IPC 1-7

B01J 29/74; C10G 45/64

IPC 8 full level

B01J 29/06 (2006.01); **B01J 29/74** (2006.01); **C10G 45/64** (2006.01); **C10G 47/14** (2006.01)

CPC (source: EP KR US)

B01J 29/74 (2013.01 - EP KR US); **B01J 29/7461** (2013.01 - EP US); **C10G 45/64** (2013.01 - EP US); **B01J 2229/26** (2013.01 - EP US); **B01J 2229/42** (2013.01 - EP US)

Citation (search report)

See references of WO 0164339A1

Citation (examination)

WO 0107158 A1 20010201 - SHELL INT RESEARCH [NL]

Cited by

US11384296B2; WO2018167081A1

Designated contracting state (EPC)

DE ES IT NL

DOCDB simple family (publication)

FR 2805762 A1 20010907; FR 2805762 B1 20040116; EP 1265705 A1 20021218; JP 2003525118 A 20030826; KR 20030003234 A 20030109; US 2003166452 A1 20030904; US 6984309 B2 20060110; WO 0164339 A1 20010907

DOCDB simple family (application)

FR 0002803 A 20000302; EP 01911825 A 20010302; FR 0100617 W 20010302; JP 2001563229 A 20010302; KR 20027011474 A 20020902; US 22042703 A 20030317