

Title (en)

Process for the simultaneous production of middle distillates and lubrication oils from heavy petroleum fractions

Title (de)

Verfahren zur gleichzeitigen Produktion von Mitteldestillaten und Schmierölen aus Schwerölfractionen

Title (fr)

Procédé pour la production conjointe de distillats moyens et d'huiles lubrifiantes à partir de coupes pétrolières lourdes

Publication

EP 0649896 B1 20000503 (FR)

Application

EP 94402284 A 19941011

Priority

FR 9312856 A 19931025

Abstract (en)

[origin: EP0649896A1] Process for joint production of middle distillates and of oil bases (viscosity index between 95 and 150) especially from vacuum distillates and/or deasphalted oils. The process includes a first stage in which the feedstock is brought into contact with an amorphous catalyst filled with at least one metal or metal compound which has a hydrodehydrogenating function, such as Ni, Mo, W or Co, at a temperature of between 350 and 430 DEG C, a pressure of between 5 and 20 MPa, a space velocity of between 0.1 and 5 h<-1> and in the presence of hydrogen in an H2/HC volume ratio = 150 to 2,000, the product originating from the first stage is brought into contact (in a second stage), with a second catalyst including a support, a zeolite Y, at least one element of group VIB and at least one metal of group VIII at a temperature of between 350 and 430 DEG C, a pressure of between 5 and 20 MPa and a space velocity of between 0.1 and 5 h<-1>.

IPC 1-7

C10G 65/12

IPC 8 full level

B01J 23/85 (2006.01); **B01J 29/16** (2006.01); **C10G 45/08** (2006.01); **C10G 45/50** (2006.01); **C10G 47/20** (2006.01); **C10G 49/04** (2006.01); **C10G 49/08** (2006.01); **C10G 65/12** (2006.01)

CPC (source: EP KR US)

C10G 45/10 (2013.01 - KR); **C10G 65/12** (2013.01 - EP US); **C10G 69/04** (2013.01 - KR)

Cited by

US5935416A; US6096189A; US5935417A; US5976353A; US6592748B2; WO2012143552A1; WO2012143550A1; WO2012143549A1; WO2016192893A1; WO2012143551A1; WO2014098820A1; WO2012143567A1; US9238779B2; WO2012143573A1; US8779225B2; US7347928B2; WO2012143568A2; US9169444B2; US6974535B2; US8557106B2; US9487714B2; WO2005085394A1; US6325918B1; US7727379B2; WO2012143564A1; WO2013072391A1; WO2013102662A1; WO2013160253A1; US9115314B2; US9217111B2; EP3018189A1; US7815789B2; WO2012143572A1; WO2013102070A2; US8927794B2; US9248444B2

Designated contracting state (EPC)

BE DE ES FR GB IT NL

DOCDB simple family (publication)

EP 0649896 A1 19950426; **EP 0649896 B1 20000503**; CA 2134281 A1 19950426; CA 2134281 C 20050802; DE 69424247 D1 20000608; DE 69424247 T2 20000907; ES 2148297 T3 20001016; FR 2711667 A1 19950505; FR 2711667 B1 19960202; JP 3564581 B2 20040915; JP H07179864 A 19950718; KR 100309488 B1 20011228; KR 950011594 A 19950515; RU 2135549 C1 19990827; RU 94037956 A 19960910; US 5525209 A 19960611

DOCDB simple family (application)

EP 94402284 A 19941011; CA 2134281 A 19941025; DE 69424247 T 19941011; ES 94402284 T 19941011; FR 9312856 A 19931025; JP 26010594 A 19941025; KR 19940027109 A 19941024; RU 94037956 A 19941024; US 33082094 A 19941024