Title (en)

LOW-PRESSURE FISCHER-TROPSCH PROCESS

Title (de)

NIEDERDRUCK-FISCHER-TROPSCH-VERFAHREN

Title (fr)

PROCÉDÉ FISCHER-TROPSCH BASSE PRESSION

Publication

EP 2379676 A4 20120620 (EN)

Application

EP 09833974 A 20091221

Priority

- CA 2009001862 W 20091221
- US 31810608 A 20081222
- CA 2008002306 W 20081222

Abstract (en)

[origin: WO2010071989A1] A Fischer-T?opsch process for producing diesel fuel or diesel blending stock with a high cetane number, in a concentration of 65-90wt% at pressures below 200 psia, using a cobalt catalyst with a rhenium and/or ruthenium promoter. The catalyst is a cobalt catalyst with crystallites having an average diameter greater than 16 nanometers, and the resulting hydrocarbon product after a rough flash, contains less than 10wt% waxes (>C23).

IPC 8 full level

C10G 2/00 (2006.01); **C07C 1/04** (2006.01); **C10L 1/08** (2006.01)

CPC (source: EP)

B01J 23/8896 (2013.01); **B01J 23/8913** (2013.01); **B01J 35/31** (2024.01); **B01J 35/40** (2024.01); **B01J 35/615** (2024.01); **B01J 35/635** (2024.01); **B01J 37/0201** (2013.01); **C01B 3/38** (2013.01); **C01B 3/382** (2013.01); **C01B 3/384** (2013.01); **C10G 2/332** (2013.01); **C10L 1/08** (2013.01); C01B 2203/0233 (2013.01); C01B 2203/0244 (2013.01); C01B 2203/025 (2013.01); C01B 2203/04 (2013.01); C01B 2203/0405 (2013.01); C01B 2203/0495 (2013.01); C01B 2203/062 (2013.01); C01B 2203/0877 (2013.01); C01B 2203/0883 (2013.01); C01B 2203/0888 (2013.01); C01B 2203/0894 (2013.01); C01B 2203/1241 (2013.01); C01B 2203/1258 (2013.01); C01B 2203/1294 (2013.01); C10G 2300/4025 (2013.01); C10G 2400/04 (2013.01); Y02P 20/52 (2015.11)

Citation (search report)

- [Y] US 2005119116 A1 20050602 - ESPINOZA RAFAEL L [US], et al
- [Y] US 2003211940 A1 20031113 - VAN BERGE PETER JACOBUS [ZA], et al
- [XYI] G. LEENDERT BEZEMER ET AL.: "COBALT PARTICLE SIZE EFFECTS IN THE FISCHER-TROPSCH REACTION STUDIED WITH CARBON NANOFIBER SUPPORTED CATALYSTS", J. AM. CHEM. SOC., vol. 128, 3 April 2006 (2006-04-03), pages 3956 - 3964, XP002675405
- [Y] OYVIND BORG ET AL.: "FISCHER-TROPSCH SYNTHESIS OVER ALUMINA SUPPORTED COBALT CATALYSTS: EFFECT OF SUPPORT VARIABLES", JOURNAL OF CATALYSIS, vol. 248, 8 March 2007 (2007-03-08), pages 89 - 100, XP002675406
- [Y] ENRIQUE IGLESIA: "DESIGN, SYNTHESIS AND USE OF COBALT BASED FISCHER-TROPSCH SYNTHESIS CATALYST", APPLIED CATLYSIS: A GENERAL, vol. 161, 31 December 1997 (1997-12-31), pages 59 - 78, XP002675407
- [Y] FERNANDO MORALES ET AL.: "PROMOTION EFFECTS IN Co-BASED FISCHER-TROPSCH CATALYSIS", CATALYSIS, vol. 19, 31 December 2006 (2006-12-31), pages 1 - 40, XP002675408
- See references of WO 2010071989A1

Citation (examination)

ROBER C. REUEL ET AL.: "THE STOICHIOMETRIES OF H2 AND CO ADSORPTIONS ON COBALT:EFFECTS OF SUPPORT AND PREPARATION", JOURNAL OF CATALYSIS, vol. 85, 19 July 1983 (1983-07-19), pages 63 - 77, XP001039902, DOI: 10.1016/0021-9517(84)90110-6

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010071989 A1 20100701; AR 074831 A1 20110216; AU 2009329785 A1 20110811; AU 2009329785 B2 20121108; CA 2748216 A1 20100701; CA 2748216 C 20160607; CN 102325858 A 20120118; CN 102325858 B 20141022; EP 2379676 A1 20111026; EP 2379676 A4 20120620; MX 2011006743 A 20111006; MY 160250 A 20170228; RU 2011130432 A 20130127; RU 2487159 C2 20130710

DOCDB simple family (application)

CA 2009001862 W 20091221; AR P090105016 A 20091221; AU 2009329785 A 20091221; CA 2748216 A 20091221; CN 200980157057 A 20091221; EP 09833974 A 20091221; MX 2011006743 A 20091221; MY PI2011002900 A 20091221; RU 2011130432 A 20091221