

Title (en)
HYDROCARBON CONVERSION PROCESS

Title (de)
KOHLENWASSERSTOFF-UMWANDLUNGSVERFAHREN

Title (fr)
PROCÉDÉ DE CONVERSION D'HYDROCARBURES

Publication
EP 2099882 A4 20101110 (EN)

Application
EP 07869795 A 20071221

Priority
• US 2007088628 W 20071221
• US 61862306 A 20061229

Abstract (en)
[origin: US2008159928A1] A process is provided to produce an ultra low sulfur diesel with less than about 10 ppm sulfur using a two-phase or liquid-phase continuous reaction zone to convert a diesel boiling range distillate preferably obtained from a mild hydrocracking unit. In one aspect, the diesel boiling range distillate is introduced to the liquid-phase continuous reaction zone over-saturated with hydrogen in an amount effective so that the liquid phase remains substantially saturated with hydrogen throughout the reaction zone as the reactions proceed.

IPC 8 full level
C10G 69/02 (2006.01); **C10G 45/22** (2006.01); **C10G 49/04** (2006.01); **C10G 49/08** (2006.01); **C10G 65/00** (2006.01); **C10G 65/08** (2006.01); **C10G 65/12** (2006.01); **C10G 65/16** (2006.01)

CPC (source: EP US)
C10G 45/22 (2013.01 - EP US); **C10G 65/04** (2013.01 - EP US); **C10G 65/12** (2013.01 - EP US); **C10G 2300/1048** (2013.01 - EP US); **C10G 2300/202** (2013.01 - EP US); **C10G 2300/307** (2013.01 - EP US); **C10G 2300/42** (2013.01 - EP US); **C10G 2400/04** (2013.01 - EP US)

Citation (search report)
• [A] EP 1394237 A1 20040303 - PROCESS DYNAMICS INC [US]
• [A] RU 2083540 C1 19970710 - DATSEVICH LEONID BORISOVICH [RU]
• [XYI] WACHE W ET AL: "Improved deep desulphurisation of middle distillates by a two-phase reactor with pre-saturator", FUEL, IPC SCIENCE AND TECHNOLOGY PRESS, GUILDFORD, GB LNKD- DOI:10.1016/J.FUEL.2005.12.019, vol. 85, no. 10-11, 1 July 2006 (2006-07-01), pages 1483 - 1493, XP025235734, ISSN: 0016-2361
• [IDY] SCHMITZ C ET AL: "Deep desulfurization of diesel oil: kinetic studies and process-improvement by the use of a two-phase reactor with pre-saturator", CHEMICAL ENGINEERING SCIENCE, OXFORD, GB LNKD- DOI:10.1016/J.CES.2004.03.015, vol. 59, no. 14, 1 July 2004 (2004-07-01), pages 2821 - 2829, XP004516503, ISSN: 0009-2509
• See references of WO 2008083094A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
US 2008159928 A1 20080703; EP 2099882 A1 20090916; EP 2099882 A4 20101110; WO 2008083094 A1 20080710

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US 61862306 A 20061229; EP 07869795 A 20071221; US 2007088628 W 20071221