

Title (en)
Process to prepare base oil and gas oil

Title (de)
Verfahren zur Herstellung von Basisöl und Gasöl

Title (fr)
Procédé pour préparer une huile de base et du gazole

Publication
EP 2746367 A1 20140625 (EN)

Application
EP 12197722 A 20121218

Priority
EP 12197722 A 20121218

Abstract (en)
A process for preparing gas oil and base oil by subjecting a part of a Fischer-Tropsch product to hydroconversion/hydroisomerisation at a conversion in the range of between 50 and 90 wt%, a hydrogen partial pressure between 45 and 75 bara, a temperature between 280 and 425 °C, using a catalyst comprising Pt and/or Pd, ASA, and no or hardly any zeolite; subjecting another part of the Fischer-Tropsch product to hydroconversion/hydroisomerisation at a conversion between 30 and 60 wt%, a hydrogen partial pressure between 20 and 55 bara, a temperature between 175 and 375 °C, using a catalyst comprising Pt and/or Pd, ASA, and 0.1-15 wt% wt% zeolite; distilling a fraction boiling in the gas oil range, a fraction boiling in the distillate base oil range, and a heavier fraction, from a combination the products of the hydroconversion/hydroisomerisation steps; recycling at least a part of the heavier fraction; performing a pour point reducing step on the fraction boiling in the distillate base oil range.

IPC 8 full level
C10G 45/58 (2006.01); **C10G 65/00** (2006.01); **C10G 65/04** (2006.01); **C10G 65/14** (2006.01); **C10G 65/16** (2006.01); **C10G 65/18** (2006.01)

CPC (source: EP)
C10G 45/58 (2013.01); **C10G 65/00** (2013.01); **C10G 65/043** (2013.01); **C10G 65/14** (2013.01); **C10G 65/16** (2013.01); **C10G 65/18** (2013.01)

Citation (applicant)
• WO 02070629 A1 20020912 - SHELL INTERNATIONALE RESERACH [NL], et al
• US 2008314800 A1 20081225 - DIERICKX JAN LODEWIJK MARIA [NL], et al
• WO 2006067174 A1 20060629 - SHELL INT RESEARCH [NL], et al
• EP 0776959 A2 19970604 - SHELL INT RESEARCH [NL]
• EP 0668342 A1 19950823 - SHELL INT RESEARCH [NL]
• US 4943672 A 19900724 - HAMNER GLEN P [US], et al
• US 5059299 A 19911022 - CODY IAN A [CA], et al
• WO 9934917 A1 19990715 - SHELL INT RESEARCH [NL]
• WO 9920720 A1 19990429 - MOBIL OIL CORP [US]
• EP 0532117 A1 19930317 - SHELL INT RESEARCH [NL]
• WO 02070628 A2 20020912 - SHELL INT RESEARCH [NL], et al
• WO 2011064236 A1 20110603 - SHELL INT RESEARCH [NL], et al
• EP 0668342 B1 19990804 - SHELL INT RESEARCH [NL]
• US 4859311 A 19890822 - MILLER STEPHEN J [US]
• WO 9718278 A1 19970522 - MOBIL OIL CORP [US]
• US 5053373 A 19911001 - ZONES STACEY I [US]
• US 5252527 A 19931012 - ZONES STACEY I [US]
• US 4574043 A 19860304 - CHESTER ARTHUR W [US], et al
• US 5157191 A 19921020 - BOWES EMMERSON [US], et al
• WO 0029511 A1 20000525 - SHELL INT RESEARCH [NL], et al
• EP 0832171 B1 20000105 - SHELL INT RESEARCH [NL]
• RYLAND; LLOYD B.; TAMELE, M.W.; WILSON, J.N.: "Cracking Catalysts, Catalysis: volume VII", 1960, PUBLISHING CORPORATION, pages: 5 - 9

Citation (search report)
• [ID] US 2008314800 A1 20081225 - DIERICKX JAN LODEWIJK MARIA [NL], et al
• [I] US 2008194901 A1 20080814 - CRAMWINCKEL MICHIEL [NL], et al
• [A] US 2010300933 A1 20101202 - TANAKA YUICHI [JP]

Cited by
WO2016138165A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2746367 A1 20140625

DOCDB simple family (application)
EP 12197722 A 20121218