

## Title (en)

Process for the preparation of hydrocarbon fuels

## Title (de)

Verfahren zur Herstellung von Kohlenwasserstoffbrennstoffen

## Title (fr)

Procédé de préparation de combustibles hydrocarbonés

## Publication

**EP 0583836 B2 20020213 (EN)**

## Application

**EP 93202395 A 19930816**

## Priority

- EP 93202395 A 19930816
- EP 92202537 A 19920818

## Abstract (en)

[origin: EP0583836A1] A process for the preparation of hydrocarbon fuels comprises the steps of: a) contacting a mixture of carbon monoxide and hydrogen with a hydrocarbon synthesis catalyst at elevated temperature and pressure to prepare a substantially paraffinic hydrocarbon product; b) contacting the hydrocarbon product so-obtained with hydrogen in the presence of a hydroconversion catalyst under conditions such that substantially no isomerisation or hydrocracking of the hydrocarbon product occurs; and c) contacting at least part of the hydrocarbon product of step (b) with hydrogen in the presence of a hydroconversion catalyst under conditions such that hydrocracking and isomerisation of the hydrocarbon feed occurs to yield a substantially paraffinic hydrocarbon fuel.

## IPC 1-7

**C10G 65/12**; **C10G 65/04**; **C07C 1/04**

## IPC 8 full level

**B01J 23/75** (2006.01); **B01J 23/74** (2006.01); **C07B 61/00** (2006.01); **C07C 1/04** (2006.01); **C07C 4/06** (2006.01); **C07C 9/15** (2006.01); **C10G 2/00** (2006.01); **C10G 65/04** (2006.01); **C10G 65/12** (2006.01); **C10G 69/00** (2006.01); **C10G 69/02** (2006.01); **C10L 1/00** (2006.01)

## IPC 8 main group level

**C07C** (2006.01); **C10G** (2006.01)

## CPC (source: EP)

**C10G 2/30** (2013.01); **C10G 65/12** (2013.01)

## Citation (opposition)

## Opponent :

- EP 0515270 A1 19921125 - INST FRANCAIS DU PETROLE [FR]
- EP 0635557 A1 19950125 - EXXON RESEARCH ENGINEERING CO [US]
- GB 2077289 A 19811216 - SHELL INT RESEARCH
- EP 0147873 A1 19850710 - SHELL INT RESEARCH [NL]
- EP 0127220 A2 19841205 - SHELL INT RESEARCH [NL]
- EP 0321303 A2 19890621 - EXXON RESEARCH ENGINEERING CO [US]
- US 4943672 A 19900724 - HAMNER GLEN P [US], et al
- "Engineering Aspects of the Conversion of Natural Gas into Middle Distillates" M.M.G. Sonden et al., NATOASI I, Ser. 275., 227-247 (1992)
- "Shell Middle Distillate Synthesis Process", M.M., J.van der Burgt et al., 5th Synfuels Worldwide Symposium (1985)

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## Designated contracting state (EPC)

BE DE DK ES FR GB IT NL SE

## DOCDB simple family (publication)

**EP 0583836 A1 19940223**; **EP 0583836 B1 19971029**; **EP 0583836 B2 20020213**; AU 4467693 A 19940224; AU 666960 B2 19960229; CA 2104158 A1 19940219; CA 2104158 C 20051115; DE 69314879 D1 19971204; DE 69314879 T2 19980312; DE 69314879 T3 20020718; DK 0583836 T3 19980302; DK 0583836 T4 20020311; DZ 1708 A1 20020217; ES 2110051 T3 19980201; ES 2110051 T5 20021001;

JP 3522797 B2 20040426; JP H06158058 A 19940607; MY 108862 A 19961130; NO 305288 B1 19990503; NO 932905 D0 19930816; NO 932905 L 19940221; NZ 248415 A 19950328; RU 2101324 C1 19980110; ZA 935964 B 19940315

DOCDB simple family (application)

**EP 93202395 A 19930816**; AU 4467693 A 19930816; CA 2104158 A 19930816; DE 69314879 T 19930816; DK 93202395 T 19930816; DZ 930092 A 19930816; ES 93202395 T 19930816; JP 22232893 A 19930816; MY PI19931620 A 19930816; NO 932905 A 19930816; NZ 24841593 A 19930816; RU 93049258 A 19930816; ZA 935964 A 19930816