

Title (en)

PROCESS FOR HYDROCONVERSION OF HEAVY HYDROCARBON FEEDSTOCK IN HYBRID REACTOR

Title (de)

VERFAHREN ZUR HYDROUMWANDLUNG VON SCHWEREN KOHLENWASSERSTOFFEINSÄTZEN IN EINEM HYBRIDREAKTOR

Title (fr)

PROCEDE D'HYDROCONVERSION DE CHARGE HYDROCARBONÉE LOURDE EN REACTEUR HYBRIDE

Publication

**EP 3723903 A1 20201021 (FR)**

Application

**EP 18807387 A 20181129**

Priority

- FR 1762061 A 20171213
- EP 2018083061 W 20181129

Abstract (en)

[origin: WO2019115248A1] The present invention relates to a process for hydroconversion of a heavy hydrocarbon feedstock in the presence of hydrogen, at least one supported solid catalyst and at least one dispersed solid catalyst obtained from at least one salt of a heteropolyanion combining molybdenum and at least one metal selected from cobalt and nickel in a Strandberg, Keggin, lacunary Keggin or substituted lacunary Keggin structure.

IPC 8 full level

**B01J 27/19** (2006.01); **B01J 23/00** (2006.01); **B01J 23/85** (2006.01); **B01J 23/88** (2006.01); **B01J 23/883** (2006.01); **B01J 23/94** (2006.01); **B01J 27/049** (2006.01); **B01J 27/051** (2006.01); **B01J 35/10** (2006.01); **B01J 37/02** (2006.01); **B01J 37/04** (2006.01); **B01J 37/08** (2006.01); **B01J 37/20** (2006.01); **C10G 45/08** (2006.01); **C10G 45/16** (2006.01); **C10G 45/46** (2006.01); **C10G 45/56** (2006.01); **C10G 47/26** (2006.01); **C10G 49/04** (2006.01)

CPC (source: EP US)

**B01J 21/04** (2013.01 - US); **B01J 23/002** (2013.01 - EP US); **B01J 23/883** (2013.01 - EP US); **B01J 23/94** (2013.01 - EP); **B01J 27/049** (2013.01 - EP); **B01J 27/0515** (2013.01 - EP US); **B01J 27/19** (2013.01 - EP US); **B01J 35/23** (2024.01 - US); **B01J 35/613** (2024.01 - EP); **B01J 35/615** (2024.01 - EP); **B01J 37/0201** (2013.01 - EP); **B01J 37/0209** (2013.01 - EP); **B01J 37/04** (2013.01 - EP US); **B01J 37/088** (2013.01 - EP US); **B01J 37/20** (2013.01 - EP US); **C10G 45/08** (2013.01 - US); **B01J 2523/00** (2013.01 - EP); **C10G 2300/107** (2013.01 - US); **C10G 2300/1077** (2013.01 - US); **C10G 2300/202** (2013.01 - US); **C10G 2300/205** (2013.01 - US); **C10G 2300/206** (2013.01 - US); **C10G 2300/208** (2013.01 - US); **C10G 2300/301** (2013.01 - US); **C10G 2300/4006** (2013.01 - US); **C10G 2300/4012** (2013.01 - US); **C10G 2300/4018** (2013.01 - US); **C10G 2300/70** (2013.01 - US)

C-Set (source: EP)

**B01J 2523/00 + B01J 2523/51 + B01J 2523/68 + B01J 2523/847**

Cited by

WO2023280626A1; FR3125059A1; WO2023280624A1; FR3125057A1

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)

**FR 3074699 A1 20190614; FR 3074699 B1 20191220**; CN 111741811 A 20201002; CN 111741811 B 20231013; EP 3723903 A1 20201021; RU 2020121163 A 20220113; RU 2020121163 A3 20220113; SA 520412157 B1 20240422; US 11192089 B2 20211207; US 2021101136 A1 20210408; WO 2019115248 A1 20190620

DOCDB simple family (application)

**FR 1762061 A 20171213**; CN 201880080315 A 20181129; EP 18807387 A 20181129; EP 2018083061 W 20181129; RU 2020121163 A 20181129; SA 520412157 A 20200608; US 201816772249 A 20181129