

Title (en)

CATALYST COMPRISING AN ACTIVE NICKEL PHASE IN THE FORM OF SMALL PARTICLES AND A NICKEL-COPPER ALLOY

Title (de)

KATALYSATOR MIT EINER AKTIVEN NICKELPHASE IN FORM VON KLEINEN TEILCHEN UND NICKEL-KUPFER-LEGIERUNG

Title (fr)

CATALYSEUR COMPRENANT UNE PHASE ACTIVE DE NICKEL SOUS FORME DE PETITES PARTICULES ET UN ALLIAGE NICKEL CUIVRE

Publication

**EP 4003591 A1 20220601 (FR)**

Application

**EP 20739700 A 20200716**

Priority

- FR 1908725 A 20190731
- EP 2020070077 W 20200716

Abstract (en)

[origin: WO2021018599A1] Disclosed is a catalyst comprising nickel and copper, specifically 1 to 50% by weight of nickel element relative to the total weight of the catalyst, and 0.5 to 15% by weight of copper element relative to the total weight of the catalyst, and an alumina support, said catalyst being characterized in that: - the molar ratio of nickel to copper is between 0.5 and 5 mol/mol; - at least some of the nickel and copper is in the form of a nickel-copper alloy; - the nickel content in the nickel-copper alloy is between 0.5 and 15 wt. % of nickel element relative to the total weight of the catalyst; - the size of the nickel particles in the catalyst is less than 7 nm.

IPC 8 full level

**B01J 23/755** (2006.01); **B01J 21/04** (2006.01); **B01J 35/00** (2024.01)

CPC (source: CN EP US)

**B01J 21/04** (2013.01 - CN EP US); **B01J 23/755** (2013.01 - CN EP US); **B01J 35/23** (2024.01 - CN US); **B01J 35/393** (2024.01 - US); **B01J 35/40** (2024.01 - US); **B01J 37/0219** (2013.01 - US); **B01J 37/0228** (2013.01 - US); **B01J 37/0236** (2013.01 - US); **B01J 37/16** (2013.01 - US); **C07C 5/03** (2013.01 - CN); **C07C 5/09** (2013.01 - US); **C07C 5/10** (2013.01 - CN US); **C10G 45/36** (2013.01 - CN); **C10G 45/48** (2013.01 - CN); **C07C 2521/04** (2013.01 - US); **C07C 2523/72** (2013.01 - US); **C07C 2523/755** (2013.01 - US); **C07C 2601/14** (2017.05 - CN); **C10G 2300/201** (2013.01 - CN); **C10G 2400/02** (2013.01 - CN)

C-Set (source: CN)

1. **C07C 5/03 + C07C 15/073**
2. **C07C 5/03 + C07C 9/18**
3. **C07C 5/10 + C07C 13/18**

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)

**WO 2021018599 A1 20210204**; CN 114144257 A 20220304; CN 114144257 B 20231117; EP 4003591 A1 20220601; FR 3099390 A1 20210205; FR 3099390 B1 20211029; JP 2022542956 A 20221007; US 2022280922 A1 20220908

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**EP 2020070077 W 20200716**; CN 202080054923 A 20200716; EP 20739700 A 20200716; FR 1908725 A 20190731; JP 2022506105 A 20200716; US 202017630238 A 20200716