

Title (en)

METHOD FOR THE SELECTIVE CATALYTIC HYDROGENATION OF ORGANIC COMPOUNDS, AND ELECTRODE AND ELECTROCHEMICAL CELL FOR SAID METHOD

Title (de)

VERFAHREN ZUR SELEKTIVEN KATALYTISCHEN HYDRIERUNG ORGANISCHER VERBINDUNGEN SOWIE ELEKTRODE UND ELEKTROCHEMISCHE ZELLE FÜR DIESES VERFAHREN

Title (fr)

PROCÉDÉ D'HYDROGÉNATION CATALYTIQUE SÉLECTIVE DE COMPOSÉS ORGANIQUES, ÉLECTRODE ET CELLULE ÉLECTROCHIMIQUE POUR LA MISE EN OEUVRE DE CE PROCÉDÉ

Publication

**EP 4377497 A2 20240605 (DE)**

Application

**EP 22761071 A 20220728**

Priority

- DE 102021119761 A 20210729
- EP 2022071292 W 20220728

Abstract (en)

[origin: CA3227590A1] The application relates to a method for the electrocatalytic hydrogenation of organic compounds in an electrochemical cell, in which the reducible organic compound is present in liquid form or at least partially in dissolved form, wherein the reducible organic compound is hydrogenated at the cathode. The cathode comprises, as a catalyst, a transition metal chalcogenide selected from sulfides, selenides and tellurides. The application also relates to an electrode, comprising a carrier material and a layer of the catalyst provided on the carrier material; to an electrochemical cell having an electrode of this type; and to the use of the transition metal chalcogenide catalyst for the electrochemical hydrogenation of organic compounds.

IPC 8 full level

**C25B 3/07** (2021.01); **C25B 3/25** (2021.01); **C25B 11/031** (2021.01); **C25B 11/042** (2021.01); **C25B 11/052** (2021.01); **C25B 11/077** (2021.01)

CPC (source: EP KR)

**C25B 3/07** (2021.01 - EP KR); **C25B 3/25** (2021.01 - EP KR); **C25B 11/031** (2021.01 - EP KR); **C25B 11/042** (2021.01 - EP KR); **C25B 11/052** (2021.01 - EP KR); **C25B 11/077** (2021.01 - EP KR)

Designated contracting state (EPC)

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