

Title (en)
METHOD FOR PRODUCING AN ACTIVE ELECTRODE LAYER FOR ELECTROCHEMICAL REDUCTION REACTIONS BY IMPREGNATION IN A MOLTEN MEDIUM

Title (de)
VERFAHREN ZUM PRODUZIEREN EINER AKTIVEN ELEKTRODENSCHICHT FÜR ELEKTROCHEMISCHE REDUKTIONSREAKTIONEN DURCH IMPRÄGNIERUNG IN EINEM GESCHMOLZENEN MEDIUM

Title (fr)
PROCEDE DE PREPARATION PAR IMPREGNATION EN MILIEU FONDU D'UNE COUCHE ACTIVE D'ELECTRODE POUR DES REACTIONS DE REDUCTION ELECTROCHIMIQUE

Publication
EP 4077765 A1 20221026 (FR)

Application
EP 20812363 A 20201201

Priority
• FR 1914613 A 20191217
• EP 2020084174 W 20201201

Abstract (en)
[origin: WO2021121979A1] Method for producing a catalytic material for an electrode for electrochemical reduction reactions, the material comprising an active phase consisting of at least one metal in the VIB group and an electrically conductive medium, the method being carried out in accordance with at least the following steps: a) bringing the electrically conductive medium into contact with water, b) bringing the wet medium into contact with at least one hydrated metal acid comprising at least one metal from the VIB group, wherein the melting temperature of the hydrated metal acid is between 20 and 100°C and the weight ratio between the metal acid and the electrically conductive medium is between 0.1 and 4, c) heating, whilst stirring, to a temperature between the melting temperature of the hydrated metal acid and 100°C, d) carrying out a sulphurisation step at a temperature between 100°C and 600°C.

IPC 8 full level
C25B 1/04 (2021.01); **C25B 11/054** (2021.01); **C25B 11/059** (2021.01); **C25B 11/061** (2021.01); **C25B 11/063** (2021.01); **C25B 11/065** (2021.01); **C25B 11/075** (2021.01); **C25B 11/091** (2021.01)

CPC (source: EP US)
C25B 1/04 (2013.01 - EP US); **C25B 11/052** (2021.01 - US); **C25B 11/054** (2021.01 - EP US); **C25B 11/059** (2021.01 - EP); **C25B 11/061** (2021.01 - EP); **C25B 11/063** (2021.01 - EP); **C25B 11/065** (2021.01 - EP US); **C25B 11/075** (2021.01 - EP US); **C25B 11/091** (2021.01 - EP US); **Y02E 60/36** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02P 20/133** (2015.11 - EP)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
FR 3104464 A1 20210618; **FR 3104464 B1 20220325**; CN 114765993 A 20220719; EP 4077765 A1 20221026; JP 2023506855 A 20230220; US 2023038342 A1 20230209; WO 2021121979 A1 20210624

DOCDB simple family (application)
FR 1914613 A 20191217; CN 202080087615 A 20201201; EP 2020084174 W 20201201; EP 20812363 A 20201201; JP 2022536735 A 20201201; US 202017783684 A 20201201