

Title (en)  
METHOD FOR PRODUCING A FUEL CELL, DEVICE FOR PRODUCING A MEMBRANE-ELECTRODE ARRANGEMENT FOR A FUEL CELL, FUEL CELL AND FUEL-CELL STACK

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINER BRENNSTOFFZELLE, VORRICHTUNG ZUR HERSTELLUNG EINER MEMBRANELEKTRODENANORDNUNG FÜR EINE BRENNSTOFFZELLE, BRENNSTOFFZELLE SOWIE BRENNSTOFFZELLENSTAPEL

Title (fr)  
PROCÉDÉ DE PRODUCTION DE PILE À COMBUSTIBLE, DISPOSITIF DE PRODUCTION D'AGENCEMENT DE MEMBRANE-ÉLECTRODE POUR PILE À COMBUSTIBLE, PILE À COMBUSTIBLE ET EMPILEMENT DE PILES À COMBUSTIBLE

Publication  
**EP 4073857 A1 20221019 (DE)**

Application  
**EP 20838916 A 20201215**

Priority  
• DE 102020106082 A 20200306  
• EP 2020086150 W 20201215

Abstract (en)  
[origin: WO2021175479A1] The invention relates to a method for producing a fuel cell (1), comprising the steps of a) preparing a plurality of catalyst pastes (16), which differ at least with respect to a parameter influencing the catalytic activity, b) filling at least two of the plurality of catalyst pastes (16) into a first applicator means (17) comprising a number of chambers (18) corresponding to the number of catalyst pastes (16) to be introduced, wherein only one of the catalyst pastes (16) is introduced into each of the chambers (18), c) filling at least two of the plurality of catalyst pastes (16) into a second applicator means (17), comprising a number of chambers (18) corresponding to the number of catalyst pastes (16) to be introduced, wherein only one of the catalyst pastes (16) is introduced into each of the chambers (18), d) coating, by way of the first applicator means (17), a first side of a sheet of film (20) of an electrolyte membrane (2) taken past the first applicator means (17) and the second applicator means (17), e) coating, by way of the second applicator means (17), a second side of the sheet of film (20), f) cutting the resulting coated electrolyte membrane (2) to size from the sheet of film (20) and turning the electrolyte membrane (2) by 90° with respect to a conveying direction (21) of the sheet of film (20), g) placing the electrolyte membrane (2) between two flux-field plates with a parameter-related gradient oriented perpendicularly to the flux field, and h) pressing the flux-field plates. The invention also relates to a device for producing a membrane-electrode arrangement for a fuel cell (1), to a fuel cell (1) and to a fuel-cell stack.

IPC 8 full level  
**H01M 4/86** (2006.01); **H01M 4/88** (2006.01); **H01M 8/1018** (2016.01)

CPC (source: EP US)  
**H01M 4/861** (2013.01 - EP US); **H01M 4/8636** (2013.01 - EP US); **H01M 4/8642** (2013.01 - US); **H01M 4/881** (2013.01 - EP US); **H01M 4/8828** (2013.01 - EP US); **H01M 4/8882** (2013.01 - EP US); **H01M 4/8896** (2013.01 - EP US); **H01M 8/0258** (2013.01 - US); **H01M 8/1004** (2013.01 - US); **H01M 2008/1095** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)  
See references of WO 2021175479A1

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)  
**DE 102020106082 A1 20210909**; CN 115152063 A 20221004; EP 4073857 A1 20221019; US 2023089402 A1 20230323; WO 2021175479 A1 20210910

DOCDB simple family (application)  
**DE 102020106082 A 20200306**; CN 202080098087 A 20201215; EP 2020086150 W 20201215; EP 20838916 A 20201215; US 202017909304 A 20201215