

Title (en)
ELECTROCHEMICAL DEVICE

Title (de)
ELEKTROCHEMISCHE VORRICHTUNG

Title (fr)
DISPOSITIF ÉLECTROCHIMIQUE

Publication
EP 3818197 A1 20210512 (DE)

Application
EP 19737677 A 20190628

Priority
• DE 102018115983 A 20180702
• EP 2019067370 W 20190628

Abstract (en)
[origin: WO2020007735A1] In order to provide an electrochemical device, comprising a stack of multiple electrochemical units which follow one another along a stacking direction and each comprise an electrochemically active membrane-electrode arrangement, a bipolar plate and a sealing system, at least one medium channel, which extends along the stacking direction through a number of the electrochemical units, and at least one flow zone, through which a medium from the medium channel can flow transversely to the stacking direction from the medium channel to another medium channel, wherein the sealing system comprises a flow-zone sealing arrangement, which extends around at least one flow zone, and at least one medium-channel sealing arrangement, which extends around a medium channel, in which electrochemical device the sealing system has a high mechanical stability and can be precisely positioned during the assembly of the electrochemical device, it is proposed that the flow-zone sealing arrangement is fixed on the membrane-electrode arrangement and the at least one medium-channel sealing arrangement is fixed on the bipolar plate.

IPC 8 full level
H01M 8/0271 (2016.01); **H01M 8/0286** (2016.01); **H01M 8/1018** (2016.01); **H01M 8/242** (2016.01); **H01M 8/2483** (2016.01)

CPC (source: EP US)
C25B 9/77 (2021.01 - EP US); **C25B 13/02** (2013.01 - US); **H01M 8/0258** (2013.01 - US); **H01M 8/0271** (2013.01 - EP); **H01M 8/0276** (2013.01 - US); **H01M 8/0286** (2013.01 - EP US); **H01M 8/242** (2013.01 - EP); **H01M 8/2483** (2016.02 - EP US); **H01M 2008/1095** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)
See references of WO 2020007735A1

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

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DE 102018115983 A1 20200102; CN 112352066 A 20210209; EP 3818197 A1 20210512; US 2021126275 A1 20210429; WO 2020007735 A1 20200109

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DE 102018115983 A 20180702; CN 201980043734 A 20190628; EP 19737677 A 20190628; EP 2019067370 W 20190628; US 202017139479 A 20201231