

Title (en)

METHOD FOR OPERATING A WATER ELECTROLYSIS DEVICE

Title (de)

VERFAHREN ZUM BETREIBEN EINER WASSERELEKTROLYSEVORRICHTUNG

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN DISPOSITIF D'ÉLECTROLYSE DE L'EAU

Publication

EP 4150136 A1 20230322 (DE)

Application

EP 20726795 A 20200515

Priority

EP 2020063724 W 20200515

Abstract (en)

[origin: WO2021228412A1] The method for operating a water electrolysis device for generating hydrogen and oxygen from water has a PEM electrolyser (1), to which water is supplied for generating the hydrogen and the oxygen together with water for cooling. The cooling water is conducted in the circuit and treated by means of an ion exchange unit (17). Only part of the water conducted in the circuit is supplied to the ion exchange unit (17) and another part is supplied to the PEM electrolyser (1) via a bypass (13), circumventing the ion exchange unit (17).

IPC 8 full level

C25B 9/13 (2021.01); **C25B 9/19** (2021.01); **C25B 15/02** (2006.01); **C25B 15/021** (2021.01); **C25B 15/08** (2006.01)

CPC (source: EP KR US)

C25B 1/04 (2013.01 - EP KR US); **C25B 9/13** (2021.01 - EP KR US); **C25B 9/19** (2021.01 - EP US); **C25B 9/23** (2021.01 - KR); **C25B 9/67** (2021.01 - KR US); **C25B 15/02** (2013.01 - EP KR); **C25B 15/021** (2021.01 - EP KR US); **C25B 15/027** (2021.01 - US); **C25B 15/083** (2021.01 - EP KR US); **C25B 15/085** (2021.01 - EP KR US); **C25B 15/087** (2021.01 - EP KR US); **Y02E 60/36** (2013.01 - EP)

Citation (search report)

See references of WO 2021228412A1

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)

WO 2021228412 A1 20211118; AU 2020446855 A1 20221103; CA 3174975 A1 20211118; CN 115667587 A 20230131; EP 4150136 A1 20230322; JP 2023529566 A 20230711; KR 20230010646 A 20230119; US 2023235469 A1 20230727

DOCDB simple family (application)

EP 2020063724 W 20200515; AU 2020446855 A 20200515; CA 3174975 A 20200515; CN 202080101027 A 20200515; EP 20726795 A 20200515; JP 2022569262 A 20200515; KR 20227039641 A 20200515; US 202017923266 A 20200515