

Title (en)

SALINITY GRADIENT POWER GENERATION DEVICE COMPRISING ELECTRODES OF AN ACTIVATED CARBON FABRIC

Title (de)

VORRICHTUNG ZUR ENERGIEERZEUGUNG MIT SALZGRADIENTEN MIT ELEKTRODEN EINES AKTIVKOHLEGEWEBES

Title (fr)

DISPOSITIF DE PRODUCTION D'ENERGIE PAR GRADIENT DE SALINITE COMPRENANT DES ELECTRODES D'UN TEXTILE DE CHARBON ACTIF

Publication

EP 4264718 A1 20231025 (FR)

Application

EP 21851675 A 20211215

Priority

- FR 2013451 A 20201217
- FR 2021052330 W 20211215

Abstract (en)

[origin: WO2022129780A1] The invention relates to a device for generating electrical power comprising a first electrode having a porosity that allows the flow of an electrolyte solution of concentration CA in a solute; a second electrode having a porosity that allows the flow of an electrolyte solution of concentration CB in a solute, CB being greater than CA; a membrane having selective permeability to anions or cations, said membrane being disposed between the two electrodes and comprising at least one channel arranged to allow the diffusion of electrolytes from the electrolyte solution of concentration CB to the electrolyte solution of concentration CA through said channel or channels; and a device making it possible to harvest the electrical power generated by the differential in potential between the two electrodes, wherein the two electrodes are formed of an activated carbon fabric, and to a method for producing electrical power using such a device.

IPC 8 full level

H01M 8/18 (2006.01); **H01M 8/24** (2016.01)

CPC (source: EP US)

H01M 4/8626 (2013.01 - US); **H01M 4/96** (2013.01 - US); **H01M 8/083** (2013.01 - US); **H01M 8/18** (2013.01 - EP); **H01M 8/188** (2013.01 - US); **H01M 8/24** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP)

Citation (search report)

See references of WO 2022129780A1

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 2022129780 A1 20220623; CA 3204183 A1 20220623; CN 116783742 A 20230919; EP 4264718 A1 20231025; FR 3117888 A1 20220624; FR 3117888 B1 20230825; JP 2023553739 A 20231225; US 2024047724 A1 20240208

DOCDB simple family (application)

FR 2021052330 W 20211215; CA 3204183 A 20211215; CN 202180090932 A 20211215; EP 21851675 A 20211215; FR 2013451 A 20201217; JP 2023537168 A 20211215; US 202118267685 A 20211215