

Title (en)

WATER-CONDUCTING ELECTRIC DEVICE AND METHOD FOR OPERATING A WATER-CONDUCTING ELECTRIC DEVICE

Title (de)

WASSERFÜHRENDES ELEKTRISCHES GERÄT UND EIN VERFAHREN ZUM BETREIBEN EINES WASSERFÜHRENDEN ELEKTRISCHEN GERÄTS

Title (fr)

DISPOSITIF ÉLECTRIQUE À CIRCULATION D'EAU ET PROCÉDÉ DE FONCTIONNEMENT D'UN DISPOSITIF ÉLECTRIQUE À CIRCULATION D'EAU

Publication

EP 4259871 A1 20231018 (DE)

Application

EP 21823526 A 20211130

Priority

- BE 202005915 A 20201214
- EP 2021083500 W 20211130

Abstract (en)

[origin: WO2022128436A1] The invention relates to a water-conducting electric device comprising a water-receiving element (1); an electrochemical cell (3) which comprises electrodes and is designed to generate a bleaching agent when the electrochemical cell contains a salt-containing solution and when a direct voltage is applied to the electrodes; a pump which is designed to convey fluid located in the electrochemical cell (3) out of the electrochemical cell (3) and into the water-receiving element (1); and a control unit (18) which is configured to selectively apply a direct voltage as well as an alternating voltage to the electrodes of the electrochemical cell (3). The invention additionally relates to a method for operating the water-conducting electric device, having the following steps: a) supplying the salt-containing solution to the electrochemical cell (3); b) applying a direct voltage to the electrodes of the electrochemical cell (3) for a specified duration following step a) in order to generate the bleaching agent in the electrochemical cell (3); c) applying an alternating voltage to the electrodes of the electrochemical cell (3) for a specified duration following step b) in order to heat fluid located in the electrochemical cell (3); and d) conveying the fluid out of the electrochemical cell (3) and into the water-receiving element (1).

IPC 8 full level

D06F 33/37 (2020.01); **D06F 35/00** (2006.01); **D06F 39/02** (2006.01); **D06F 39/04** (2006.01); **D06F 39/08** (2006.01); **D06F 103/44** (2020.01);
D06F 103/52 (2020.01); **D06F 105/06** (2020.01); **D06F 105/10** (2020.01); **D06F 105/40** (2020.01); **D06F 105/42** (2020.01)

CPC (source: EP KR)

D06F 33/37 (2020.02 - EP); **D06F 34/08** (2020.02 - KR); **D06F 35/003** (2013.01 - EP KR); **D06F 39/04** (2013.01 - EP);
D06F 39/085 (2013.01 - KR); **D06F 39/088** (2013.01 - KR); **D06F 39/022** (2013.01 - EP); **D06F 39/083** (2013.01 - EP);
D06F 39/088 (2013.01 - EP); **D06F 2103/44** (2020.02 - EP KR); **D06F 2103/52** (2020.02 - EP); **D06F 2105/02** (2020.02 - KR);
D06F 2105/06 (2020.02 - EP); **D06F 2105/10** (2020.02 - EP); **D06F 2105/40** (2020.02 - EP); **D06F 2105/42** (2020.02 - EP)

Citation (search report)

See references of WO 2022128436A1

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 2022128436 A1 20220623; BE 1028887 A1 20220707; BE 1028887 B1 20220712; CN 116601353 A 20230815; EP 4259871 A1 20231018;
KR 20230118836 A 20230814

DOCDB simple family (application)

EP 2021083500 W 20211130; BE 202005915 A 20201214; CN 202180083443 A 20211130; EP 21823526 A 20211130;
KR 20237018998 A 20211130