Title (en)

FLUID BASED ON WATER WHICH IS ELECTROLYTICALLY TREATED IN AT LEAST ONE ELECTROLYSIS CELL AND USE OF THE SAME AS A CLEANING AND/OR DISINFECTION AGENT

Title (de)

FLÜSSIGKEIT AUF DER BASIS VON WASSER, WELCHE IN ZUMINDEST EINER ELEKTROLYSEZELLE ELEKTROLYTISCH BEHANDELT WIRD, UND VERWENDUNG ALS REINIGUNGS- UND/ODER DESINFEKTIONSMITTEL

Title (fr)

LIQUIDE À BASE D'EAU, SUBISSANT UN TRAITEMENT PAR ÉLECTROLYSE DANS AU MOINS UNE CELLULE D'ÉLECTROLYSE, ET UTILISATION EN TANT QU'AGENT DE NETTOYAGE ET/OU DE DÉSINFECTION

Publication

EP 2830669 A1 20150204 (DE)

Application

EP 13717449 A 20130328

Priority

- AT 501122012 A 20120329
- EP 2013056671 W 20130328

Abstract (en)

[origin: WO2013144278A1] The invention relates to a fluid based on water which is electrolytically treated in at least one electrolysis cell, such that at least one cleaning and/or disinfecting substance is produced as an electrolysis product. The fluid already has lime-dissolving and/or fat-dissolving properties before the electrolytic treatment, wherein the lime-dissolving properties can be ascribed to the fact that the fluid contains one or more of the anions citrate, acetate, tartrate and/or formate, and wherein the fat-dissolving properties can be ascribed to the fact that the fluid contains anions of higher carboxylic acids, particularly saturated C14 to C18 fatty acids or sulfonate, particularly alkylbenzol sulfonate, or hydroxide, and wherein the fluid contains Na+ ions and/or K+ ions, and/or K+ ions and anions of at least one carboxylic acid and/or carbonic acid and/or at least one oxyacid, cations and anions each with a total content of at least 0.1 g/L. On the basis of the composition of the starting solution, active oxygen compounds are formed during the electrolysis according to the invention. The active oxygen, which bonds directly with the components of the cleaning solution, makes it possible for the compounds dissolving fat, lime or protein to penetrate rapidly into oxidatively accessible contaminant layers. In this manner even organic contaminants covered by organic compounds or a biofilm, or hydrophobic organic contaminants, which resist treatment with conventional cleaning agents, are made accessible.

IPC 8 full level

A61L 2/03 (2006.01); **C25B 3/23** (2021.01); **B08B 3/08** (2006.01); **C02F 1/461** (2006.01); **C11D 1/22** (2006.01); **C11D 7/06** (2006.01); **C11D 7/12** (2006.01); **C11D 7/26** (2006.01); **C11D 9/02** (2006.01); **C11D 11/00** (2006.01)

CPC (source: EP US)

C11D 1/22 (2013.01 - EP US); **C11D 1/65** (2013.01 - US); **C11D 7/06** (2013.01 - EP US); **C11D 7/12** (2013.01 - EP US); **C11D 7/265** (2013.01 - EP US); **C11D 9/02** (2013.01 - EP US); **C11D 17/0047** (2013.01 - US); **C11D 17/0073** (2013.01 - EP US); **C11D 17/06** (2013.01 - EP US); B08B 3/08 (2013.01 - EP US); C11D 2111/46 (2024.01 - EP US)

Citation (search report)

See references of WO 2013144278A1

Citation (examination)

- US 2007277847 A1 20071206 - LIU YULING [CN], et al
- US 2003109398 A1 20030612 - YONEDA TETSUYA [JP], et al
- WO 2009067838 A2 20090604 - STEFFEN HANSPETER [CH]

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)

WO 2013144278 A1 20131003; AT 512689 A1 20131015; EP 2830669 A1 20150204; US 2015051135 A1 20150219

DOCDB simple family (application)

EP 2013056671 W 20130328; AT 501122012 A 20120329; EP 13717449 A 20130328; US 201314387757 A 20130328