

Title (en)

METHOD FOR CLEANING FILTRATION MEMBRANE MODULES AND MEMBRANE BIOREACTOR SYSTEM FOR TREATING UNTREATED WATER OR WASTEWATER OR ACTIVATED SLUDGE

Title (de)

VERFAHREN ZUR REINIGUNG VON FILTRATIONSMEMBRANMODULEN SOWIE MEMBRANBIOREAKTOR-SYSTEM ZUM AUFBEREITEN VON ROH- ODER ABWASSER BZW. BELEBTSCHLAMM

Title (fr)

PROCÉDÉ DE LAVAGE DE MODULES DE MEMBRANES DE FILTRAGE ET SYSTÈME DE BIORÉACTEUR À MEMBRANES DESTINÉ À TRAITER DES EAUX BRUTES OU USÉES OU DES BOUES ACTIVÉES

Publication

EP 2274077 A1 20110119 (DE)

Application

EP 09737841 A 20090423

Priority

- EP 2009002944 W 20090423
- DE 102008021190 A 20080429

Abstract (en)

[origin: WO2009132797A1] In order to clean filtration modules for the treatment of raw water or wastewater, or activated sludge, particles are circulated in the untreated water. As an alternative, a cleaning tank comprising a circulating fluid containing particles is provided for the temporary accommodation of the filtration module. The deposits located on the filter membrane outer surfaces, the so-called membrane fouling, are removed by the mechanical action of the particles, without damaging the membrane. Initially, untreated water, wastewater, or activated sludge is chemically-mechanically pretreated. Then the untreated water or wastewater polluted with biologically active material is discharged into the membrane bioreactor system, which has a filtration unit comprising at least one filtration tank. At least one submerged filtration membrane module is present in the filtration tank. The untreated water or wastewater in the filtration tank is filled with particles and circulates inside the filtration tank. The particles are non-porous, biologically resistant polymer particles.

IPC 8 full level

B01D 65/02 (2006.01); **C02F 3/12** (2006.01)

CPC (source: EP US)

B01D 65/02 (2013.01 - EP US); **B01D 65/025** (2013.01 - EP US); **C02F 3/1273** (2013.01 - EP US); **B01D 65/04** (2013.01 - EP US); **C02F 2303/16** (2013.01 - EP US); **Y02W 10/10** (2015.05 - EP US)

Citation (search report)

See references of WO 2009132797A1

Citation (examination)

JP H11300350 A 19991102 - KANTOU REGIONAL CONSTR BUREAU, et al

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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