

Title (en)

METHOD AND DEVICE FOR ELECTROCHEMICALLY DISINFECTING FLUIDS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ELEKTROCHEMISCHEN FLUIDDESINFEKTION

Title (fr)

PROCEDE ET DISPOSITIF DE DESINFECTION ELECTROCHIMIQUE DE FLUIDES

Publication

EP 1409415 A2 20040421 (EN)

Application

EP 00992643 A 20001204

Priority

- US 0042584 W 20001204
- US 45310699 A 19991202

Abstract (en)

[origin: WO0142143A2] A method for treating fluids operates on a continuously flowing stream of fluid. The stream is acted upon in a continuous flow process to generate a disinfectant species (e.g., chlorine) in the stream and to simultaneously lower the pH of the stream below approximately 4.0. The stream is passed through an electrochemical cell and an electric potential difference is applied across electrodes of the cell during the passage of the stream through the cell. Relative to its flow through a channel upstream of the cell, the stream is accelerated when flowing through the cell. The stream at an outlet of the electrochemical cell is raised to a neutral pH range, thus producing a disinfected solution. This step may be implemented by passing the effluent stream between differentially charged electrodes, for example, of the same electrochemical cell. A chemical disinfecting method is also disclosed.

IPC 1-7

C02F 1/461

IPC 8 full level

A61L 2/03 (2006.01); **C02F 1/461** (2006.01); **C02F 1/467** (2006.01); **C02F 1/00** (2006.01); **C02F 1/32** (2006.01); **C02F 9/00** (2006.01)

CPC (source: EP)

A61L 2/035 (2013.01); **C02F 1/46104** (2013.01); **C02F 1/4618** (2013.01); **C02F 1/4674** (2013.01); **C02F 1/001** (2013.01); **C02F 1/32** (2013.01); **C02F 9/00** (2013.01); **C02F 2001/46152** (2013.01); **C02F 2103/42** (2013.01); **C02F 2201/4611** (2013.01); **C02F 2201/46115** (2013.01); **C02F 2201/4612** (2013.01); **C02F 2201/46145** (2013.01); **C02F 2201/46185** (2013.01); **C02F 2209/003** (2013.01); **C02F 2209/04** (2013.01); **C02F 2209/06** (2013.01); **C02F 2301/022** (2013.01); **C02F 2303/04** (2013.01)

Citation (search report)

See references of WO 0142143A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0142143 A2 20010614; **WO 0142143 A3 20011101**; AU 4517801 A 20010618; CA 2394859 A1 20010614; EP 1409415 A2 20040421

DOCDB simple family (application)

US 0042584 W 20001204; AU 4517801 A 20001204; CA 2394859 A 20001204; EP 00992643 A 20001204