

Title (en)

ELECTROLYTIC APPARATUS, METHODS FOR PURIFICATION OF AQUEOUS SOLUTIONS AND SYNTHESIS OF CHEMICALS

Title (de)

ELEKTROLYTISCHE VORRICHTUNG, VERFAHREN ZUR REINIGUNG VON WÄSSRIGEN LÖSUNGEN UND SYNTHESE VON CHEMIKALIEN

Title (fr)

APPAREIL ELECTROLYTIQUE, PROCEDES DE PURIFICATION DE SOLUTIONS AQUEUSES, ET SYNTHESE DE SUBSTANCES CHIMIQUES

Publication

EP 1150921 A4 20030618 (EN)

Application

EP 99965141 A 19991206

Priority

- US 9928869 W 19991206
- US 20692498 A 19981207
- US 43368699 A 19991104

Abstract (en)

[origin: WO0034184A1] Electropurification of contaminated aqueous media, such as ground water and wastewater from industrial manufacturing facilities like paper mills, food processing plants and textile mills, is readily purified, decolorized and sterilized by improved, more economic open configuration electrolysis cell (10) designs with electrodes (18, 20) comprising a plurality of conductive porous elements in electrical contact with one another. The cells (10) may be divided or undivided, and connected in monopolar or bipolar configuration. When coupled with very narrow capillary gap electrodes (18, 20) more economic operation, particularly when treating solutions of relatively low conductivity is assured. The novel cell design (10) is also useful in the electrosynthesis of chemicals, both organic and inorganic types, such as hypochlorite bleaches and other oxygenated species.

IPC 1-7

C02F 1/461

IPC 8 full level

C02F 1/46 (2006.01); **C02F 1/461** (2006.01); **C25B 9/00** (2006.01); **C02F 1/42** (2006.01); **C02F 1/467** (2006.01)

CPC (source: EP)

C02F 1/46104 (2013.01); **C02F 1/46109** (2013.01); **C02F 1/42** (2013.01); **C02F 1/4672** (2013.01); **C02F 1/4674** (2013.01); **C02F 1/4676** (2013.01); **C02F 2001/46128** (2013.01); **C02F 2001/46133** (2013.01); **C02F 2001/46157** (2013.01); **C02F 2101/163** (2013.01); **C02F 2103/30** (2013.01); **C02F 2201/4611** (2013.01); **C02F 2201/46115** (2013.01); **C02F 2201/46155** (2013.01); **C02F 2303/04** (2013.01); **C02F 2305/026** (2013.01)

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Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 0034184 A1 20000615; AP 2001002197 A0 20010930; AU 3112000 A 20000626; AU 767548 B2 20031113; BG 105679 A 20020628; BR 9915992 A 20010904; CA 2355346 A1 20000615; CA 2355346 C 20040720; CN 1329576 A 20020102; CZ 20012002 A3 20020515; EE 200100303 A 20020815; EP 1150921 A1 20011107; EP 1150921 A4 20030618; HU P0104664 A2 20020328; ID 30239 A 20011115; IL 143529 A0 20020421; IS 5954 A 20010529; JP 2002531704 A 20020924; MX PA01005705 A 20030714; NO 20012804 D0 20010607; NO 20012804 L 20010607; NZ 512645 A 20021025; OA 11806 A 20050810; PL 348151 A1 20020506; SK 7672001 A3 20011203; TR 200101659 T 20011022; TW 490444 B 20020611

DOCDB simple family (application)

US 9928869 W 19991206; AP 2001002197 A 19991206; AU 3112000 A 19991206; BG 10567901 A 20010706; BR 9915992 A 19991206; CA 2355346 A 19991206; CN 99814149 A 19991206; CZ 20012002 A 19991206; EE P200100303 A 19991206; EP 99965141 A 19991206; HU P0104664 A 19991206; ID 20011452 A 19991206; IL 14352999 A 19991206; IS 5954 A 20010529; JP 2000586638 A 19991206; MX PA01005705 A 19991206; NO 20012804 A 20010607; NZ 51264599 A 19991206; OA 1200100141 A 19991206; PL 34815199 A 19991206; SK 7672001 A 19991206; TR 200101659 T 19991206; TW 88121297 A 19991206