

Title (en)

METHOD AND DEVICE FOR THE TREATMENT OF ORGANICALLY AND/OR BIOLOGICALLY CONTAMINATED WATER AND/OR AIR CONTAMINATED WITH OXYGEN IONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR AUFBEREITUNG VON ORGANISCH UND/ODER BIOLOGISCH VERUNREINIGTEM WASSER BZW. VERUNREINIGTER LUFT MIT SAUERSTOFF-IONEN

Title (fr)

PROCEDE ET DISPOSITIF DE TRAITEMENT D'EAU OU D'AIR ORGANIQUEMENT ET / OU BIOLOGIQUEMENT CONTAMINES A L'AIDE D'IONS D'OXYGENE

Publication

EP 1732851 A1 20061220 (DE)

Application

EP 05715063 A 20050301

Priority

- DE 2005000387 W 20050301
- DE 102004010656 A 20040301

Abstract (en)

[origin: WO2005082791A1] The invention relates to a method and to a device for the treatment of organically and/or biologically contaminated water and/or contaminated air by means of an intensive treatment of water and/or air with positive and negative oxygen ions as an oxidation agent, which are produced in an ionizer. According to the invention, said aim is achieved by means of a method, wherein; air is suctioned through a filter by means of a blower/compressor, and is swirled in a tubular-shaped ion producer and the oxygen molecules are ionised at a voltage of 2.300 V to 6.400 V and at frequencies of 25 Hz to 580 Hz with a pulse frequency of 4.000 to 16.000 Hz and the air is introduced over a wide area into the medium, which is to be prepared, through a discharge system having electrostatically charged particles and is distributed. The optimal working range is controlled by measuring the ion intensity by means of an ion measuring probe and a control system adapted thereto.

IPC 8 full level

C02F 1/74 (2006.01); **A61L 9/22** (2006.01); **B01D 53/32** (2006.01); **C01B 13/02** (2006.01); **C02F 1/00** (2006.01); **C02F 1/46** (2006.01); **C02F 1/78** (2006.01)

CPC (source: EP KR)

A61L 9/22 (2013.01 - EP); **B01D 53/00** (2013.01 - KR); **B01D 53/323** (2013.01 - EP); **C01B 13/02** (2013.01 - EP); **C02F 1/74** (2013.01 - EP); **B01D 2251/102** (2013.01 - EP); **B01D 2259/80** (2013.01 - EP); **C02F 1/001** (2013.01 - EP); **C02F 1/008** (2013.01 - EP); **C02F 1/4608** (2013.01 - EP); **C02F 1/78** (2013.01 - EP); **C02F 2101/306** (2013.01 - EP); **C02F 2103/02** (2013.01 - EP); **C02F 2103/20** (2013.01 - EP); **C02F 2103/22** (2013.01 - EP); **C02F 2103/32** (2013.01 - EP); **C02F 2303/04** (2013.01 - EP); **C02F 2305/023** (2013.01 - EP)

Citation (search report)

See references of WO 2005082791A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005082791 A1 20050909; DE 102004010656 A1 20050922; DE 102004010656 B4 20071206; EP 1732851 A1 20061220; KR 20070007811 A 20070116

DOCDB simple family (application)

DE 2005000387 W 20050301; DE 102004010656 A 20040301; EP 05715063 A 20050301; KR 20067020567 A 20061002