

Title (en)

APPARATUS AND METHOD FOR THE BIOELECTROCHEMICAL DENITRIFICATION OF FLUIDS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR BIOELEKTROCHEMISCHEN DENITRIFIKATION VON FLUIDEN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE DÉNITRIFICATION BIO-ÉLECTROCHIMIQUE DE FLUIDES

Publication

EP 2454204 A2 20120523 (DE)

Application

EP 10754900 A 20100714

Priority

- EP 2010060162 W 20100714
- DE 102009026179 A 20090715

Abstract (en)

[origin: WO2011006939A2] The denitrification process in methods using sessile biofilms is a problem that has not been satisfactorily solved in wastewater treatment technologies. Recirculating wastewater or adding synthetic carbon in order to supply an electron donor for oxidizing the nitrate are both complex and expensive solutions. The proposed method avoids said drawbacks and uses organisms that can accept electrons directly from a cathode. Said method is environmentally friendly in several respects: it uses significantly less electricity, the amount of sludge is reduced, and the process is easy to control. Another advantage for the environment is that energy-saving systems using sessile biofilms can be easily and inexpensively retrofitted.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2011006939A2

Citation (examination)

WO 2009072887 A1 20090611 - SPARK ORIGIN B V [NL], et al

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