

Title (en)

WATER TREATMENT METHOD FOR SIMULTANEOUS ABATEMENT OF CARBON, NITROGEN AND PHOSPHORUS, IMPLEMENTED IN A SEQUENCING BATCH MOVING BED BIOFILM REACTOR

Title (de)

VERFAHREN ZUR WASSERBEHANDLUNG ZUR GLEICHZEITIGEN BESEITIGUNG VON KOHLENSTOFF, STICKSTOFF UND PHOSPHOR IN EINEM SEQUENCING-BATCH-BIOFILMREAKTOR MIT WANDERBETT

Title (fr)

PROCEDE DE TRAITEMENT DES EAUX POUR L'ABATTEMENT SIMULTANE DU CARBONE, DE L'AZOTE ET DU PHOSPHORE, MIS EN ? UVRE DANS UN REACTEUR A FILM BIOLOGIQUE A LIT MOBILE EN MODE SEQUENTIEL DISCONTINU

Publication

EP 3891103 A1 20211013 (FR)

Application

EP 19816263 A 20191202

Priority

- FR 1872437 A 20181206
- EP 2019083345 W 20191202

Abstract (en)

[origin: WO2020114979A1] Water treatment method for simultaneous abatement of carbon, nitrogen and phosphorus, implemented in a sequencing batch moving bed biofilm reactor (SBMBBR) comprising supports suitable for the development of a biofilm. The method comprises sequences of successive treatments, each treatment sequence comprising: an initial phase of anaerobic treatment, said initial phase of anaerobic treatment being followed by at least one aerobic/anoxic cycle consisting of: an aerobic treatment phase so as to obtain an ammonium ion concentration that does not pass below a threshold concentration of ammonium ions; and, a phase in which the biofilm is placed, at least locally, under anoxic conditions, this phase being concomitant with or posterior to said aerobic treatment phase; the threshold concentration of ammonium ions being calculated to allow the development of anammox microorganisms during the phase in which the biofilm is placed, at least locally, under anoxic conditions.

IPC 8 full level

C02F 3/08 (2006.01); **C02F 3/30** (2006.01)

CPC (source: EP US)

C02F 3/085 (2013.01 - EP US); **C02F 3/301** (2013.01 - EP US); **C02F 3/307** (2013.01 - US); **C02F 3/308** (2013.01 - US); **C02F 3/307** (2013.01 - EP); **C02F 3/308** (2013.01 - EP); **C02F 2101/105** (2013.01 - US); **C02F 2101/16** (2013.01 - US); **C02F 2209/14** (2013.01 - EP US); **C02F 2209/44** (2013.01 - EP US); **Y02W 10/10** (2015.05 - EP US)

Citation (search report)

See references of WO 2020114979A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020114979 A1 20200611; AU 2019393988 A1 20210617; CA 3121344 A1 20200611; CN 113226996 A 20210806; EP 3891103 A1 20211013; FR 3089512 A1 20200612; FR 3089512 B1 20201120; SG 11202105902V A 20210729; US 11820688 B2 20231121; US 2022017392 A1 20220120

DOCDB simple family (application)

EP 2019083345 W 20191202; AU 2019393988 A 20191202; CA 3121344 A 20191202; CN 201980087060 A 20191202; EP 19816263 A 20191202; FR 1872437 A 20181206; SG 11202105902V A 20191202; US 201917299824 A 20191202