

Title (en)

APPARATUS AND METHOD FOR IMPROVED PURIFICATION OF WASTEWATER

Title (de)

VORRICHTUNG UND VERFAHREN ZUR VERBESSERTEN REINIGUNG VON ABWASSER

Title (fr)

APPAREIL ET PROCÉDÉ D'ÉPURATION AMÉLIORÉE DES EAUX USÉES

Publication

EP 4255854 A1 20231011 (EN)

Application

EP 21820631 A 20211206

Priority

- EP 20212285 A 20201207
- EP 2021084456 W 20211206

Abstract (en)

[origin: EP4008690A1] Biomass recirculation unit for an anaerobic purification apparatus of fluid, comprising: an inlet system configured to receive influent fluid from outside, a biomass collecting system for drawing off biomass from a middle section in the reactor tank and bringing the biomass into the biomass recirculation unit, a mixing segment for being connected to the inlet system and the biomass collecting system, and for receiving and mixing the influent fluid and the biomass, and an outlet system for discharging a mixture of the influent fluid and the biomass into the lower section of the reactor tank, the inlet system comprising a constricted nozzle for, as the influent fluid flows from the inlet system to the mixing segment through the constricted nozzle, creating a suction effect causing the biomass collecting system to draw off the biomass from the middle section of the reactor tank into the mixing segment.

IPC 8 full level

C02F 3/28 (2023.01); **B01F 25/21** (2022.01); **B01F 25/50** (2022.01)

CPC (source: EP)

B01F 25/50 (2022.01); **C02F 3/2846** (2013.01); **C02F 3/286** (2013.01); **C02F 3/2873** (2013.01); **B01F 25/211** (2022.01)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4008690 A1 20220608; CN 116802156 A 20230922; EP 4255854 A1 20231011; JP 2024501428 A 20240112; WO 2022122678 A1 20220616

DOCDB simple family (application)

EP 20212285 A 20201207; CN 202180092650 A 20211206; EP 2021084456 W 20211206; EP 21820631 A 20211206;
JP 2023533907 A 20211206