

Title (en)

WATER TREATMENT PLANT AND CORRESPONDING METHOD

Title (de)

WASSERAUFBEREITUNGSANLAGE UND ZUGEHÖRIGES VERFAHREN

Title (fr)

INSTALLATION POUR LE TRAITEMENT DES EAUX ET PROCÉDÉ CORRESPONDANT

Publication

**EP 3648862 A1 20200513 (FR)**

Application

**EP 18733605 A 20180625**

Priority

- FR 1756397 A 20170706
- EP 2018066985 W 20180625

Abstract (en)

[origin: WO2019007744A1] The invention relates to a water treatment plant which comprises means (38) for supplying the water to be treated, means (31) for supplying coagulant reagent (21), a flocculation-decantation device (1) which has means (32) for dispensing the flocculant reagent, means (33) for distributing ballast, means (39d) for extracting decantation sludge and means (9) for discharging water that has been treated, a line (8) for supplying coagulated water to the flocculation-decantation device (1), means (24) for separating the ballast contained in the ballasted sludge followed by means (36) for recycling the ballast back into said flocculation-decantation device (1), characterised in that said device (1) comprises an outer tank (2) that has a first hopper (4), and at least one inner tank (3) that has a second hopper (5) and is arranged inside said outer tank (2); the inner tank (3) receiving the flocculant and the ballast and comprising stirring means (10), wherein a peripheral space is disposed between the inner tank (3) and the outer tank (2); the second hopper (5) having an opening (6) which opens into the first hopper (4); and said first hopper (4) having an outlet that communicates with the means (34) for discharging ballasted sludge, wherein the means (9) for discharging water that has been treated are disposed in the upper portion of said outer tank (2). The invention also relates to a method for implementing a plant of this types.

IPC 8 full level

**B01D 21/00** (2006.01); **B01D 21/01** (2006.01); **B01D 21/08** (2006.01); **B01D 21/24** (2006.01); **B03D 3/06** (2006.01); **C02F 1/52** (2006.01)

CPC (source: EP US)

**B01D 21/0042** (2013.01 - EP); **B01D 21/0045** (2013.01 - EP); **B01D 21/0087** (2013.01 - US); **B01D 21/01** (2013.01 - EP US); **B01D 21/08** (2013.01 - EP US); **B01D 21/16** (2013.01 - EP US); **B01D 21/2472** (2013.01 - US); **B01D 21/2488** (2013.01 - EP US); **C02F 1/5209** (2013.01 - EP US); **C02F 2209/40** (2013.01 - EP US); **C02F 2305/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2019007744A1

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 2019007744 A1 20190110**; CA 3067103 A1 20190110; CN 110891666 A 20200317; EP 3648862 A1 20200513; FR 3068615 A1 20190111; FR 3068615 B1 20200619; US 2020155972 A1 20200521

DOCDB simple family (application)

**EP 2018066985 W 20180625**; CA 3067103 A 20180625; CN 201880045092 A 20180625; EP 18733605 A 20180625; FR 1756397 A 20170706; US 201816628772 A 20180625