

Title (en)

IMPROVED SLUDGE DEWATERING PROCESS ASSISTED BY FLOCCULATING REACTANT AND PLANT FOR THE IMPLEMENTATION OF SUCH A PROCESS

Title (de)

VERBESSERTES SCHLAMMENTWÄSSERUNGSVERFAHREN MIT UNTERSTÜTZUNG DURCH FLOCKUNGSREAKTANTEN UND ANLAGE ZUR DURCHFÜHRUNG SOLCH EINES VERFAHRENS

Title (fr)

PROCEDE AMELIORE DE DESHYDRATATION DE BOUES ASSISTEE PAR REACTIF FLOCULANT ET INSTALLATION POUR LA MISE EN OEUVRE D'UN TEL PROCEDE

Publication

EP 3468928 A1 20190417 (FR)

Application

EP 17722823 A 20170515

Priority

- FR 1655229 A 20160608
- EP 2017061634 W 20170515

Abstract (en)

[origin: WO2017211542A1] Sludge dewatering process assisted by flocculating reactant, said process comprising an injection of flocculating reactant into the sludge and a step of dewatering said sludge, characterized in that it comprises a preliminary step that consists in mixing said sludge in a mixer (4) comprising a cylindrical chamber (4a) equipped with blades (4c) rotatably mounted on a shaft (4b) rotating at a speed of rotation of between 500 rpm and 4000 rpm, so as to destructure the sludge and reduce the viscosity thereof, and in discharging the sludge from said mixer (4) via a network (11) to said dewatering step, and in that it comprises a step of depressurizing said mixer (4) and said network giving rise to the lysis, by cavitation, of said sludge, said depressurizing step being carried out over a period of at least 0.1 second. Corresponding plant.

IPC 8 full level

C02F 1/34 (2006.01); **C02F 1/52** (2006.01); **C02F 11/148** (2019.01); **C02F 11/127** (2019.01)

CPC (source: EP IL KR US)

C02F 1/34 (2013.01 - IL KR); **C02F 1/5245** (2013.01 - EP IL KR US); **C02F 9/00** (2013.01 - IL US); **C02F 11/121** (2013.01 - IL);
C02F 11/127 (2013.01 - IL KR); **C02F 11/13** (2019.01 - IL); **C02F 11/14** (2013.01 - IL); **C02F 11/143** (2019.01 - KR);
C02F 11/148 (2019.01 - EP US); **C02F 1/34** (2013.01 - EP US); **C02F 11/127** (2013.01 - EP US); **C02F 11/13** (2019.01 - US);
C02F 2201/005 (2013.01 - IL US); **C02F 2301/063** (2013.01 - EP IL KR US); **C02F 2303/06** (2013.01 - EP IL KR US);
C02F 2303/26 (2013.01 - EP IL KR US)

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 2017211542 A1 20171214; AU 2017276542 A1 20181220; AU 2017276542 B2 20221103; BR 112018075325 A2 20190319;
CA 3026314 A1 20171214; CN 109476520 A 20190315; CN 109476520 B 20220503; EP 3468928 A1 20190417; FR 3052450 A1 20171215;
FR 3052450 B1 20200110; IL 263527 A 20190131; IL 263527 B 20210831; JP 2019501020 A 20190117; JP 6792623 B2 20201125;
KR 102339124 B1 20211215; KR 20190016042 A 20190215; NZ 748838 A 20211029; US 10981820 B2 20210420; US 2020290911 A1 20200917

DOCDB simple family (application)

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CN 201780042374 A 20170515; EP 17722823 A 20170515; FR 1655229 A 20160608; IL 26352718 A 20181205; JP 2018534047 A 20170515;
KR 20187037974 A 20170515; NZ 74883817 A 20170515; US 201716307288 A 20170515