

Title (en)

WATER RECIRCULATION DEVICE WITH WATER LEVEL ESTIMATION, WATER FLOW ESTIMATION, AND/OR AIR BUBBLE PREVENTION

Title (de)

WASSERUMWÄLZUNGSVORRICHTUNG MIT WASSERSTANDSCHÄTZUNG, WASSERFLUSSSCHÄTZUNG UND/ODER LUFTBLASENVERHINDERUNG

Title (fr)

DISPOSITIF DE RECIRCULATION D'EAU AVEC ESTIMATION DE NIVEAU D'EAU, ESTIMATION DE FLUX D'EAU, ET/OU PRÉVENTION DE BULLES D'AIR

Publication

EP 3918141 A4 20221109 (EN)

Application

EP 20748309 A 20200127

Priority

- SE 1950096 A 20190128
- SE 2020050062 W 20200127

Abstract (en)

[origin: WO2020159421A1] The present invention describes a system 1 allowing for purification and recycling of water or separation of water, wherein said system allowing for purification and recycling of water or separation of water comprises a recirculation loop, a water tank 200, a fresh water inlet 300 connected to the water tank 200, a water treatment unit, a sensor system and a control system, wherein the sensor system gives input to the control system with respect to a selection decision of either recycling of water in the system or separation of water from the system in at least one separation point, wherein there is arranged an air gap between the fresh water inlet 300 and the maximum water level in the water tank 200, wherein the water tank 200 comprises multiple level sensors which are connected to a data processing unit for the system 1, and wherein the data processing unit is arranged to register different levels in the water tank 200 and/or to calculate inflow to the water tank 200 based on water level estimation in said multiple level sensors.

IPC 8 full level

E03B 7/07 (2006.01); **A47K 3/28** (2006.01); **E03B 1/04** (2006.01); **E03C 1/00** (2006.01); **E03C 1/04** (2006.01); **G01F 23/24** (2006.01)

CPC (source: EP)

C02F 1/008 (2013.01); **C02F 1/32** (2013.01); **E03B 1/041** (2013.01); **E03B 1/042** (2013.01); **E03B 11/02** (2013.01); **E03C 1/00** (2013.01); **E03C 1/102** (2013.01); **C02F 1/001** (2013.01); **C02F 2209/05** (2013.01); **C02F 2209/11** (2013.01); **C02F 2209/40** (2013.01); **C02F 2209/42** (2013.01); **C02F 2301/046** (2013.01); **C02F 2307/06** (2013.01); **C02F 2307/12** (2013.01); **G01F 23/24** (2013.01); **Y02A 20/00** (2017.12); **Y02A 20/30** (2017.12)

Citation (search report)

- [IY] US 5293654 A 19940315 - CASTWALL LENNART W [SE], et al
- [YA] EP 3348717 A1 20180718 - ALSTOM TRANSP TECH [FR], et al
- [A] WO 2019013691 A1 20190117 - ORBITAL SYSTEMS AB [SE]
- [A] GB 2198193 A 19880608 - HARVEY SOFTENERS LIMITED
- [A] WO 2016141345 A1 20160909 - EVA SMART SHOWER LLC [US]
- See references of WO 2020159421A1

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

DOCDB simple family (publication)

WO 2020159421 A1 20200806; EP 3918141 A1 20211208; EP 3918141 A4 20221109

DOCDB simple family (application)

SE 2020050062 W 20200127; EP 20748309 A 20200127