

Title (en)
METHOD AND APPARATUS FOR REDUCING SODIUM CONTENT IN CULTIVATION WATER FOR PLANTS AND CULTIVATION SYSTEM COMPRISING SAID APPARATUS

Title (de)
VERFAHREN UND VORRICHTUNG ZUR REDUZIERUNG DES NATRIUMGEHALTS IN PFLANZENZUCHTWASSER UND PFLANZENZUCHTSYSTEM MIT DIESER VORRICHTUNG

Title (fr)
PROCÉDÉ ET APPAREIL DE RÉDUCTION DE LA TENEUR EN SODIUM DE L'EAU DE CULTURE DE PLANTES ET SYSTÈME DE CULTURE COMPRENANT LEDIT APPAREIL

Publication
EP 4294765 A1 20231227 (EN)

Application
EP 22705179 A 20220216

Priority

- NL 2027567 A 20210216
- NL 2022050080 W 20220216

Abstract (en)
[origin: WO2022177425A1] A method is presented for reducing sodium content of cultivation water for plants. This method comprising the steps of: contacting cultivation water with a cation exchange resin configured to capture at least sodium ions, resulting in an effluent C; contacting an aqueous solution S with the cation exchange resin to remove sodium ions from the cation exchange resin, resulting in an effluent S comprising sodium ions, the aqueous solution S comprising cations not being sodium ions and anions soluble in water with the cations; discharging the effluent S; contacting an aqueous solution R with the cation exchange resin to regenerate the cation exchange resin, resulting in an effluent R, the aqueous solution R comprising an acid; and recirculating at least one of the effluent C and the effluent R for use for plants. Further, an apparatus suitable for implementing said method is presented as well as a cultivation system for plants comprising said apparatus.

IPC 8 full level
C02F 1/42 (2023.01); **B01J 39/05** (2017.01); **B01J 39/18** (2017.01); **C02F 101/10** (2006.01)

CPC (source: EP)
B01J 39/05 (2016.12); **B01J 39/07** (2016.12); **B01J 39/20** (2013.01); **B01J 49/06** (2016.12); **B01J 49/53** (2016.12); **C02F 1/42** (2013.01); **C02F 2001/425** (2013.01); **C02F 2101/10** (2013.01); **C02F 2209/05** (2013.01); **C02F 2209/06** (2013.01); **C02F 2303/04** (2013.01); **C02F 2303/16** (2013.01)

Citation (search report)
See references of WO 2022177425A1

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)
WO 2022177425 A1 20220825; EP 4294765 A1 20231227; NL 2027567 A 20220914; NL 2027567 B1 20220914

DOCDB simple family (application)
NL 2022050080 W 20220216; EP 22705179 A 20220216; NL 2027567 A 20210216