

Title (en)
ULTRAFILTRATION SYSTEM AND BACKWASHING METHOD

Title (de)
ULTRAFILTRATIONSANLAGE UND RÜCKSPÜLVERFAHREN

Title (fr)
SYSTÈME D'ULTRAFILTRATION ET PROCÉDÉ DE LAVAGE À CONTRE-COURANT

Publication
EP 4200256 A1 20230628 (DE)

Application
EP 20841708 A 20201221

Priority
EP 2020087520 W 20201221

Abstract (en)
[origin: WO2022135676A1] The invention relates to an ultrafiltration system (1) for producing drinking water, having parallel ultrafiltration units (3), each of which have one or more parallel ultrafiltration modules (3a, 3b, 3c) having a raw water side (5a), a filtrate side (5b) and at least one filtration membrane (6) lying therebetween, and which can be operated in a filtration mode and in a backwashing mode. Each ultrafiltration unit (3) is connected to a central filtrate line (5b) by means of a first line (8a, 8b, 8c) for filtrate drainage in the filtration mode and by means of a second line (8', 8a', 8b', 8c'), parallel to the first line, for filtrate supply in the backwashing mode, such that filtrate of the first ultrafiltration unit (3) can be conveyed to the filtrate side (5b) of the second ultrafiltration unit (3). A valve (Fa, Fb, Fc) is arranged in the first line (8a, 8b, 8c), for backflow prevention in the backwashing mode. A pressure reducer element (10) is arranged in the second line (8', 8a', 8b', 8c') to protect the ultrafiltration modules (3a, 3b, 3c) against excessively high pressures in the backwashing mode. The invention also relates to a backwashing method for said ultrafiltration system (1).

IPC 8 full level
C02F 1/44 (2023.01)

CPC (source: EP)
C02F 1/444 (2013.01); **C02F 2201/004** (2013.01); **C02F 2201/005** (2013.01); **C02F 2303/16** (2013.01); **C02F 2307/14** (2013.01)

Citation (search report)
See references of WO 2022135676A1

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 2022135676 A1 20220630; CN 116507590 A 20230728; EP 4200256 A1 20230628

DOCDB simple family (application)
EP 2020087520 W 20201221; CN 202080107450 A 20201221; EP 20841708 A 20201221