(12) International Application Status Report

Received at International Bureau: 29 June 2016 (29.06.2016)
Information valid as of: 03 October 2018 (03.10.2018)
Report generated on: 23 October 2019 (23.10.2019)

(10) Publication number:
WO2017/002022

(43) Publication date:
05 January 2017 (05.01.2017)

(26) Publication language:
French (FR)

(21) Application Number:
PCT/IB2016/053869

(22) Filing Date:
29 June 2016 (29.06.2016)

(25) Filing language:
French (FR)

(31) Priority number(s):
15 56236 (FR)

(31) Priority date(s):
02 July 2015 (02.07.2015)

(31) Priority status:
Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:
C02F 1/44 (2006.01); ***B01D 61/12*** (2006.01); ***B01D 61/06*** (2006.01); *C02F 103/08* (2006.01)

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(54) Title (EN): METHOD FOR CONTROLLING A DESALINATION PLANT FED BY A SOURCE OF RENEWABLE ENERGY AND ASSOCIATED PLANT

(54) Title (FR): PROCEDE DE PILOTAGE D'UNE INSTALLATION DE DESSALEMENT ALIMENTEE PAR UNE SOURCE D' ENERGIE RENOUVELABLE ET INSTALLATION ASSOCIEE

(57) Abstract:
(EN): The invention relates to a method for controlling a desalination plant of the type comprising one primary seawater supply loop (21, 24, 25, 27) having at least one reverse-osmosis tangential filtration unit (12a, 12b) comprising filtration membranes, one secondary loop (22) having an energy recovery unit (14), and means for supplying (23) power generated by a renewable energy source supplying, according to variable frequencies and power outputs, the pumps of the primary and secondary loops (1, 7, 13), characterized in that the control method includes at least one operating mode in which the pressure and flow rate of the secondary loop (22) are adjusted such that the flow rate of the permeate and the conversion rate change constantly, in parallel and continuously, between a zero value and the maximum value thereof according to the power supplied by the renewable energy source. The invention also relates to the associated plant.

(FR): L'invention se rapporte à un procédé de pilotage d'une installation de dessalement du type comportant une boucle primaire (21, 24, 25, 27) d'alimentation en eau de mer dotée d'au moins une unité de filtration à membranes de filtration tangentielle à osmose inverse (12a, 12b), une boucle secondaire (22) dotée d'une unité de récupération d'énergie (14), des moyens d'alimentation (23) en courant issu d'une source d'énergie renouvelable alimentant suivant des fréquences et des puissances variables les pompes des boucles primaire et secondaire (1, 7, 13), caractérisé en ce que le procédé de pilotage comprend au moins un mode d'exploitation dans lequel la pression et le débit dans la boucle secondaire (22) sont ajustés, de sorte que le débit de perméats et le taux de conversion évoluent en permanence, en parallèle et en continu, entre une valeur nulle et leur valeur maximum en fonction de la puissance fournie par la source d'énergie renouvelable. L'invention se rapporte également à l'installation associée.

International search report:
Received at International Bureau: 01 August 2016 (01.08.2016) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:
Not available

(81) Designated States:
AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR
African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG
African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW
Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM