

Title (en)
IMPROVED WATER DESALINATION SYSTEM

Title (de)
VERBESSERTES WASSERENTSALZUNGSSYSTEM

Title (fr)
SYSTÈME AMÉLIORÉ DE DESSALEMENT D'EAU

Publication
EP 2331224 A1 20110615 (EN)

Application
EP 09736491 A 20090906

Priority
• IL 2009000864 W 20090906
• US 13642508 P 20080904

Abstract (en)
[origin: WO2010026589A1] A system and method for desalination of seawater W having an original water salinity and a original water concentration of scale forming components, the system comprising: a pre-treatment sub-system for at least partial removal from said water W of said scale forming components, producing thereby a pre-treated feed water having a first concentration of scale forming components lower than said original concentration of scale forming components; a forward feed flow multi-effect evaporator adapted for distillation of said pre-treated feed water, producing thereby main desalted water product WM having a desalted water salinity lower than said water salinity, and main brine having a salt concentration of approximately 10%; a concentrator adapted for receiving therein said main brine and concentrating it, producing thereby more concentrated brine with an increased salt concentration of approximately 20%-22%, and releasing a first additional desalted water product W1; and a crystallizer for receiving said more concentrated brine, adapted for crystallization thereof to obtain at least solid salt products and releasing a second additional desalted water product W2.

IPC 8 full level
B01D 1/26 (2006.01); **C02F 1/04** (2006.01)

CPC (source: EP)
B01D 1/26 (2013.01); **C02F 1/04** (2013.01); **C02F 5/02** (2013.01); **C02F 1/042** (2013.01); **C02F 2001/007** (2013.01); **C02F 2001/5218** (2013.01); **C02F 2101/101** (2013.01); **C02F 2103/08** (2013.01); **Y02A 20/124** (2017.12)

Citation (search report)
See references of WO 2010026589A1

Citation (examination)
• GB 2443802 A 20080521 - L E T LEADING EDGE TECHNOLOGIE [GB]
• US 4276117 A 19810630 - GEESEN DONALD H
• US 3392089 A 19680709 - GUPTILL JR FRANK E, et al

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
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DOCDB simple family (application)
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