

Title (en)
SOLAR-POWERED CONTINUOUS DISTILLATION ASSEMBLY HAVING EFFICIENT HEAT RECOVERY

Title (de)
SOLARBETRIEBENER KONTINUIERLICHER DESTILLATOR MIT EFFIZIENTER WÄRMERÜCKGEWINNUNG

Title (fr)
DISTILLATEUR SOLAIRE CONTINU À RÉCUPÉRATION DE CHALEUR EFFICACE

Publication
EP 3837031 A1 20210623 (DE)

Application
EP 19798522 A 20190814

Priority
• AT 601252018 A 20180817
• AT 2019060258 W 20190814

Abstract (en)
[origin: WO2020033984A1] The invention relates to a distillation assembly (1) which, with the aid of solar energy (2), continuously evaporates a feed liquor (4). Said distillation assembly (1) comprises: a container (3) which contains the feed liquor (4), a container (5) in which the distillate (6) is collected, these containers (3, 5) being in thermal contact, and a compressor (7). The compressor (7) compresses the vapour which is produced by boiling the feed liquor (4) using the concentration of solar energy (2) and/or using negative pressure, into the distillate container (5) such that the vapour condenses there, and the evaporation enthalpy and thermal energy is returned to the feed liquor (4) by the thermal contact.

IPC 8 full level
B01D 1/28 (2006.01); **B01D 1/00** (2006.01); **B01D 1/30** (2006.01); **B01D 5/00** (2006.01); **C02F 1/04** (2006.01); **C02F 1/14** (2006.01)

CPC (source: AT EP IL KR US)
B01D 1/0035 (2013.01 - EP IL KR US); **B01D 1/28** (2013.01 - EP IL KR); **B01D 1/2843** (2013.01 - EP IL KR); **B01D 1/2881** (2013.01 - US); **B01D 1/2887** (2013.01 - EP IL KR US); **B01D 1/289** (2013.01 - EP IL KR); **B01D 1/2896** (2013.01 - EP IL KR US); **B01D 1/305** (2013.01 - EP IL KR); **B01D 3/02** (2013.01 - AT KR US); **B01D 3/10** (2013.01 - AT KR); **B01D 5/00** (2013.01 - AT); **B01D 5/006** (2013.01 - EP IL KR US); **C02F 1/041** (2013.01 - EP IL KR); **C02F 1/14** (2013.01 - EP IL KR US); **C02F 1/283** (2013.01 - IL KR); **C02F 1/32** (2013.01 - IL KR); **C02F 1/36** (2013.01 - IL KR); **C02F 1/442** (2013.01 - IL KR); **C02F 1/444** (2013.01 - IL KR); **C02F 1/283** (2013.01 - EP); **C02F 1/32** (2013.01 - EP); **C02F 1/36** (2013.01 - EP); **C02F 1/442** (2013.01 - EP); **C02F 1/444** (2013.01 - EP); **C02F 2103/08** (2013.01 - EP IL KR); **C02F 2303/20** (2013.01 - EP IL KR); **C02F 2303/22** (2013.01 - EP IL KR); **Y02A 20/124** (2017.12 - EP KR); **Y02A 20/212** (2017.12 - EP KR); **Y02P 70/10** (2015.11 - EP KR)

Citation (search report)
See references of WO 2020033984A1

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

DOCDB simple family (publication)
WO 2020033984 A1 20200220; **WO 2020033984 A4 20200522**; AT 521595 A1 20200315; AT 521595 B1 20211115; AU 2019321863 A1 20210415; BR 112021002891 A2 20210511; CL 2021000406 A1 20210903; CN 112601594 A 20210402; EA 202190549 A1 20210427; EP 3837031 A1 20210623; GE P20227422 B 20221010; IL 280925 A 20210429; JO P20210031 A1 20210217; KR 20210045446 A 20210426; MA 53233 A 20211124; MX 2021001886 A 20210716; PE 20210690 A1 20210412; US 11820674 B2 20231121; US 2021206658 A1 20210708

DOCDB simple family (application)
AT 2019060258 W 20190814; AT 601252018 A 20180817; AU 2019321863 A 20190814; BR 112021002891 A 20190814; CL 2021000406 A 20210216; CN 201980054468 A 20190814; EA 202190549 A 20190814; EP 19798522 A 20190814; GE AP2019015584 A 20190814; IL 28092521 A 20210216; JO P20210031 A 20190814; KR 20217007835 A 20190814; MA 53233 A 20190814; MX 2021001886 A 20190814; PE 2021000221 A 20190814; US 201917268824 A 20190814