Title (en)

CLOSED-CYCLE CONDENSER DRYER WITH HEAT REGENERATION

Title (de)

KONDENSATIONSTROCKNER MIT GESCHLOSSENEM KREISLAUF UND WÄRMERÜCKFÜHRUNG

Title (fr)

SÈCHE-LINGE À CONDENSATION À CYCLE FERMÉ AVEC RÉGÉNÉRATION THERMIQUE

Publication

EP 3117166 A4 20171220 (EN)

Application

EP 15760660 A 20150210

Priority

- IB 2014059620 W 20140311
- US 201514594186 A 20150112
- IB 2015050984 W 20150210

Abstract (en)

[origin: WO2015136393A1] A drying apparatus (20) includes a compartment (24) for containing objects (28) to be dried, a closed-loop air pathway and a regeneration heat exchanger (44). The closed-loop air pathway includes a cooling element (60) and a heating element (52, 72), and is configured to extract from the compartment air (40) that includes moisture in the form of vapor, to evacuate heat energy from the extracted air to an external fluid flow (84, 86) by cooling using the cooling element so as to remove at least some of the moisture from the air, to reheat the air using the heating element, and to re-introduce the reheated air (76) into the compartment. The regeneration heat exchanger is inserted in the closed-loop air pathway and is configured to transfer heat from the air (40) extracted from the compartment to the air (64) exiting the cooling element in the closed-loop air pathway.

IPC 8 full level

D06F 58/20 (2006.01); D06F 58/24 (2006.01)

CPC (source: EP US)

D06F 58/20 (2013.01 - EP US); D06F 58/24 (2013.01 - EP US)

Citation (search report)

- [Y] GB 570541 A 19450711 - LISTER BROTHERS LTD, et al
- [Y] GB 2375812 A 20021127 - DBK TECHNITHERM LTD [GB]
- [A] EP 2267207 A1 20101229 - KANNEGIESSER H GMBH CO [DE]
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- [A] US 3509639 A 19700505 - ARENDT HANS FRITZ
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- See references of WO 2015136393A1

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

DOCDB simple family (publication)

WO 2015136393 A1 20150917; EP 3117166 A1 20170118; EP 3117166 A4 20171220; EP 3117166 B1 20200408

DOCDB simple family (application)

IB 2015050984 W 20150210; EP 15760660 A 20150210