

Title (en)

APPARATUS AND METHOD FOR HEAT RECOVERY

Title (de)

VORRICHTUNG UND VERFAHREN ZUR WÄRMERÜCKGEWINNUNG

Title (fr)

APPAREIL ET PROCÉDÉ DE RÉCUPÉRATION DE CHALEUR

Publication

**EP 3825633 C0 20231101 (EN)**

Application

**EP 20209549 A 20201124**

Priority

FI 20196012 A 20191125

Abstract (en)

[origin: EP3825633A1] There is provided a heat exchange apparatus (100), comprising: a heat transfer area (102) for receiving material having a first temperature; and a heat transfer arrangement (104) attached to the underside of the heat transfer area. The heat transfer arrangement (104) comprises vertical layers (106, 108, 110) of tube arrangements where each layer comprises a number of tubes side by side. The heat transfer arrangement is configured to receive via an input tube section (116) gas for receiving heat radiated or conducted from the material, the gas having a second temperature, where the first temperature is higher than the second temperature. The heat transfer arrangement further comprises a deflector structure (112, 114) for directing the gas from tubes of one layer to tubes of another layer, a heat collecting structure inside the tubes and an output tube section (118) for delivering the heated gas out from the heat exchange apparatus. The heat exchange apparatus further comprises a controller (124) configured to control the amount and velocity of gas in the tubes.

IPC 8 full level

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CPC (source: EP FI)

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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

Participating member state (EPC – UP)

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