

Title (en)
METHOD OF HEATING AND/OR EVAPORATING AN ORGANIC MEDIUM AND A HEAT EXCHANGER UNIT FOR RECOVERING HEAT FROM A HOT GAS FLOW

Title (de)
VERFAHREN ZUM ERWÄRMEN UND/ODER VERDAMPFEN EINES ORGANISCHEN MITTELS UND WÄRMETAUSCHEREINHEIT ZUR RÜCKGEWINNUNG VON WÄRME AUS DEM HEISSGASSTROM

Title (fr)
PROCEDE DE CHAUFFAGE ET / OU D'EVAPORATION D'UN MILIEU ORGANIQUE ET UNITE D'ECHANGEUR DE CHALEUR DESTINEE A RECUPERER DE LA CHALEUR A PARTIR D'UN ECOULEMENT DE GAZ CHAUD

Publication
EP 1966559 A4 20111019 (EN)

Application
EP 06808029 A 20061110

Priority
• FI 2006050488 W 20061110
• FI 20055718 A 20051230

Abstract (en)
[origin: WO2007077293A1] A heat exchanger unit for recovering heat from a hot gas flow to a medium flow, which heat exchanger comprises an enclosure structure (30, 31, 31'), a gas flow inlet (25'), in which the gas is adapted to flow in a substantially vertical direction, and a gas flow outlet (36), in which heat exchanger unit the enclosure structure encompasses several heat exchangers (21, 22, 23, 24) provided with an essentially gas-tight wall and arranged at least partially within each other with respect to the longitudinal axis (26) of the enclosure structure so that the gas flow is arranged to pass every time in a space, which is formed of two within each other arranged heat exchangers. The enclosure structure comprises a bottom section (31'), against which the heat exchangers are mainly supported by means of a support arrangement (32), and the support arrangement comprises an opening surface (28) in at least one of the heat exchangers for allowing the through-flow of the gas from one side of the heat exchanger to the other side thereof. The invention also relates to a method, in which heat is transferred to the first heat exchanger (21) in the flow direction of the organic medium to cool the gas flow to its final temperature.

IPC 8 full level
F28D 7/02 (2006.01); **F01K 25/08** (2006.01)

CPC (source: EP FI)
F01K 25/08 (2013.01 - FI); **F22B 1/18** (2013.01 - EP); **F22B 37/142** (2013.01 - EP); **F28D 7/024** (2013.01 - EP); **F28D 7/04** (2013.01 - FI)

Citation (search report)
• [XAI] US 4044727 A 19770830 - RYCHEN NIKLAUS, et al
• [IA] DE 2330503 C2 19841018
• [IA] US 3351041 A 19671107 - DANIEL WATSON HENRY, et al
• [A] US 1738086 A 19291203 - WADSWORTH FRANK L O
• [A] GB 1221521 A 19710203 - MITCHELL ENGINEERING LTD [GB], et al
• [A] US 2718217 A 19550920 - WALTER JR RICHARD H
• See references of WO 2007077293A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007077293 A1 20070712; CA 2632275 A1 20070712; CA 2632275 C 20131001; EP 1966559 A1 20080910; EP 1966559 A4 20111019; EP 1966559 B1 20130522; FI 120557 B 20091130; FI 20055718 A0 20051230; FI 20055718 A 20070701; RU 2008131292 A 20100210; RU 2403522 C2 20101110; UA 92777 C2 20101210

DOCDB simple family (application)
FI 2006050488 W 20061110; CA 2632275 A 20061110; EP 06808029 A 20061110; FI 20055718 A 20051230; RU 2008131292 A 20061110; UA A200809882 A 20061110