Title (en)

A METHOD AND AN APPLIANCE FOR THE UTILIZATION OF THE HEAT OF CONDENSATION OF THE WATER CONTENT OF FLUE GASES

Publication

EP 0172660 A3 19871202 (EN)

Application

EP 85305193 A 19850722

Priority

DK 355184 A 19840720

Abstract (en)

[origin: EP0172660A2] In a method and a device for the recovery of heat of condensation of aqueous vapours in flue gases from the boilers of a district heating plant, in which a steam-driven heat pump is used for the transmission of the heat content of the flue gases to the return water from the consumer circuit before the water is sent back to the boilers, a heat pump is used which has two steps. The first step is operated at a lower temperature than the second step. Discharge steam from the first step is utilized for the operation of the second step. The first step comprises a compressor heat pump driven by a steam expansion engine. The second step comprises a steam jet compressor. There is obtained a comparatively low temperature at the giving-off of the heat of condensation recovered, which is a condition for achieving a high effect factor necessary for obtaining reasonable installation costs.

IPC 1-7

F24D 3/00; F24H 1/10; F25B 27/00

IPC 8 full level

F24H 1/10 (2006.01); **F24H 4/02** (2006.01); **F25B 27/00** (2006.01)

CPC (source: EP)

F24H 1/107 (2013.01); **F24H 4/02** (2013.01); **F25B 27/00** (2013.01)

Citation (search report)

- [A] EP 0008680 A2 19800319 - HUELS CHEMISCHE WERKE AG [DE]
- [A] DE 2543569 A1 19770407 - HERRMANN HANS DR ING
- [A] FR 2477684 A2 19810911 - DOSMOND RENE [FR]

Cited by

US5964986A; CN100455947C; CN109990305A; CN104930539A; CN114576677A; FR2749376A1; EP0890803A1; BE1027662A1; WO2021069334A1

Designated contracting state (EPC)

AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0172660 A2 19860226; **EP 0172660 A3 19871202**; DK 355184 A 19860121; DK 355184 D0 19840720; NO 852859 L 19860121

DOCDB simple family (application)

EP 85305193 A 19850722; DK 355184 A 19840720; NO 852859 A 19850717