

Title (en)

INTEGRALLY FORMED, COMBINED HEAT EXCHANGER

Title (de)

INTEGRIERTER KOMBINIERTER WÄRMETAUSCHER

Title (fr)

ECHANGEUR DE CHALEUR COMBINE, INCORPORE

Publication

EP 0902869 A1 19990324 (EN)

Application

EP 97923327 A 19970522

Priority

- NL 9700288 W 19970522
- NL 1003215 A 19960528

Abstract (en)

[origin: WO9745681A1] The invention relates to a combined heat exchanger (1) for heating tap water and central heating-water by means of hot gases, comprising tap water ducts (10) and central heating water ducts (9), wherein the tap water ducts (10) and the central heating water ducts (9) are incorporated in a single heat exchanger body (2). According to the invention the tap water ducts (10) and the central heating water ducts (9) are arranged alternately at least in a first part of the heat exchanger body. According to a preferred embodiment the heat exchanger body (2) is manufactured from aluminium or an alloy containing aluminium and the tap water ducts are provided with an internal layer (16). The use of aluminium enables a further decrease in the flue gas temperatures; possible condensation moisture formed when the dew point is reached does not adversely affect the aluminium.

IPC 1-7

F24H 1/48

IPC 8 full level

F24H 1/48 (2006.01); **F28D 7/00** (2006.01)

CPC (source: EP)

F24H 1/48 (2013.01); **F28D 7/0066** (2013.01); **F28D 7/0083** (2013.01)

Citation (search report)

See references of WO 9745681A1

Cited by

EP2072931A2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9745681 A1 19971204; AT E196355 T1 20000915; DE 69703106 D1 20001019; DE 69703106 T2 20010503; EP 0902869 A1 19990324;
EP 0902869 B1 20000913; NL 1003215 C2 19971203

DOCDB simple family (application)

NL 9700288 W 19970522; AT 97923327 T 19970522; DE 69703106 T 19970522; EP 97923327 A 19970522; NL 1003215 A 19960528