

Title (en)

Heat exchanger and heating apparatus of improved efficiency

Title (de)

Wärmetauscher und Heizgerät mit verbessertem Wirkungsgrad

Title (fr)

Echangeur de chaleur et appareil de chauffage avec rendement amélioré

Publication

EP 0971179 A1 20000112 (EN)

Application

EP 99202199 A 19990706

Priority

NL 1009570 A 19980706

Abstract (en)

A heat exchanger comprising a burner space (2), a flue duct (14) connected to the burner space (2), and a water duct (12), wherein the water duct (12) and the flue duct (14) are at least partly interwoven, such that a part of the water duct (12) is at least partly surrounded on at least three sides by the flue duct (14). A heating apparatus comprising such a heat exchanger, wherein at least the flue duct (14) is at least partly closed off from the surroundings by covering parts which are relatively easily removable for inspection and maintenance of the flue duct portion in question, preferably such that upon removal of the covering parts, the whole flue duct is accessible from the surroundings. <IMAGE>

IPC 1-7

F24H 1/28; F24H 1/44; F28F 7/02

IPC 8 full level

F24H 1/28 (2006.01); **F24H 1/44** (2006.01); **F28F 7/02** (2006.01)

CPC (source: EP)

F24H 1/26 (2013.01); **F24H 1/287** (2013.01); **F24H 1/40** (2013.01); **F24H 1/44** (2013.01); **F28F 7/02** (2013.01)

Citation (search report)

- [X] DE 3022652 A1 19811224 - KOCH DIETER WALTER [DE]
- [A] DE 3807194 A1 19880922 - VAILLANT JOH GMBH & CO [AT]

Cited by

ITBO20100636A1; EP1146307A3; US2010000725A1; WO2012052977A3

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0971179 A1 20000112; NL 1009570 C2 20000110

DOCDB simple family (application)

EP 99202199 A 19990706; NL 1009570 A 19980706