

Title (en)

Fluid heater and process of heating a fluid.

Title (de)

Flüssigkeitserhitzer und Verfahren zum Erhitzen einer Flüssigkeit.

Title (fr)

Chaudière et procédé de chauffage d'un fluide.

Publication

EP 0018824 A1 19801112 (EN)

Application

EP 80301415 A 19800430

Priority

US 3510079 A 19790501

Abstract (en)

A high efficiency heater for air or water is disclosed in which the combustion products from a flame are forced through water in a contacting device (10) in a manner to transfer almost all of the useable heat of the combustion products to the water, and to heat the water to a temperature of about 50 to 85 DEG C. The cooled waste gases are vented to the atmosphere, and the heated water is passed through a heat exchanger (14) to heat air or water such as for a home heating system. As the heated water passed from the contacting device (10) to the heat exchanger (14) is at a temperature below the normal boiling point of water, a plastic heat exchanger can be used, which is low enough in cost to permit using a large unit for maximum heat utilization.

IPC 1-7

F24H 1/10; **F28F 21/06**

IPC 8 full level

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CPC (source: EP)

F24H 1/107 (2013.01); **F28F 21/065** (2013.01)

Citation (search report)

- FR 2339830 A1 19770826 - ALSTHOM CGEE [FR]
- DE 2425100 A1 19751211 - BOSCH GMBH ROBERT
- HEATING/PIPING/AIRCONDITIONING, Vol. 43, September 1971, No. 9 Stanford US A.A. FIELD: "Submerged Combustion" pages 111 and 112. * Entire document *

Cited by

EP1862754A3; EP0181703A3; ES2360315A1; GB2415244A; GB2415244B; FR2731506A1

Designated contracting state (EPC)

BE DE FR GB IT NL SE

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