

Title (en)
A heating system.

Title (de)
Heizeinrichtung.

Title (fr)
Système de chauffage.

Publication
EP 0059098 A1 19820901 (EN)

Application
EP 82300899 A 19820223

Priority
• IE 36481 A 19810224
• IE 106781 A 19810513

Abstract (en)
A heating system for transferring heat from a heat source in a combustion space to a heat exchange fluid includes an enclosed chamber (2) to serve as a reservoir for heat-exchange fluid and a tubular heat exchange manifold (14) communicating with the chamber and projecting therefrom into the combustion space above and adjacent to the heat source. In a domestic heating system, the manifold (14) comprises two side tubes (15, 16) projecting substantially horizontally from the base of a back boiler (1), with a plurality of inclined cross tubes (17, 18, 19) connecting the side tubes (15, 16), which side tubes communicate with the boiler chamber (2). One of the side tubes (16) communicates with a <<low resistance zone>> (23) within the chamber which is created by a baffle plate (22) acting as a partition extending vertically from the base (8) of the chamber to near its roof (7) and bridging front (6) and back (5) walls of the chamber. The chamber can be designed to surround a flue duct (60). In use, a fire is set on a firegrate (46) situated below the tubular manifold (14), but solid fuel may also be placed in between and on top of the manifold tubes. The system can also be applied to an industrial boiler (85).

IPC 1-7
F24B 9/04

IPC 8 full level
F24B 1/183 (2006.01); **F24B 9/00** (2006.01)

CPC (source: EP)
F24B 1/183 (2013.01); **F24B 9/00** (2013.01)

Citation (search report)
• [X] GB 144808 A 19200621 - JOHN SCHOFIELD SHAW, et al
• [X] FR 2294404 A1 19760709 - JULIE CLEMENT [FR]
• [XP] FR 2478789 A1 19810925 - TECH CHAUFFAGE EXPLOIT NLES [FR]
• [Y] US 1432538 A 19221017 - DE ARMOND WALTER EVARD
• [A] FR 2428791 A3 19800111 - PRANEUF GILBERT [FR]
• [A] US 2172711 A 19390912

Cited by
ES2402514R1; CN105222163A; GB2162306A; CN105222188A; CN105299701A; EP2275744A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LU NL SE

DOCDB simple family (publication)
EP 0059098 A1 19820901; EP 0059098 B1 19851030; DE 3267084 D1 19851205; DK 78882 A 19820825; FI 820559 L 19820825; GB 2096308 A 19821013; IE 49640 B1 19851113; IE 810364 L 19820824; NO 820561 L 19820825

DOCDB simple family (application)
EP 82300899 A 19820223; DE 3267084 T 19820223; DK 78882 A 19820223; FI 820559 A 19820219; GB 8116025 A 19810526; IE 36481 A 19810224; NO 820561 A 19820223