

Title (en)
Warm air heater

Title (de)
Warmluft-Heizeinrichtung

Title (fr)
Appareil de chauffage à air chaud

Publication
EP 0908681 A3 20010321 (DE)

Application
EP 98810862 A 19980831

Priority
CH 235997 A 19971008

Abstract (en)
[origin: EP0908681A2] Heat is stored by stones arranged around the stove, and a steady circulation of hot air is achieved using a fan in the pedestal to blow air up through chambers next to the stones, around the smoke trap, and back through the chambers towards the fan intake slot. The heater includes a fire grate (2), a door for the solid fuel burning stove, and a heat exchanger for generating hot air. A metal insert (1) surrounding the fireplace (3) is used to form the stove and smoke trap (6). The stove cladding is formed by stones (12, 12) with a heat storage capacity, air chambers being created between the stones and the stove. Air guide plates (18) are situated in the smoke trap region. A radial fan housed inside the fireplace pedestal (8) is used to generate a flow of hot air up through at least one of the air chambers, around the outside of the smoke trap and back through at least one more air chamber in the pedestal to a fan intake slot (11). Independent claims are also included for: (a) the heating process utilizing the above arrangement; and (b) a mounting arrangement for the heat storage stones, using a bow frame fixed to a stone adjoining two abutting stones, which has a flat middle region received by a slot in the stone, and two protruding arms for supporting the abutting stones.

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F24B 1/188

IPC 8 full level
F24B 1/188 (2006.01)

CPC (source: EP)
F24B 1/1885 (2013.01)

Citation (search report)
• [A] DE 3110402 A1 19820422 - FREI PIUS AG [CH]
• [A] US 4365142 A 19821221 - ALIN ARNE
• [A] EP 0480870 A1 19920415 - FREI MARTIN [CH]

Cited by
CN102226536A; WO2024026242A1

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