

Title (en)

Heater, especially for a vehicle heater

Title (de)

Heizeinrichtung, insbesondere eine Kraftfahrzeugheizeinrichtung

Title (fr)

Chaudière, en particulier pour systèmes de chauffage de véhicules automobiles

Publication

**EP 1296101 B1 20120620 (DE)**

Application

**EP 02015117 A 20020705**

Priority

DE 10146610 A 20010921

Abstract (en)

[origin: EP1296101A2] The heat exchanger has a housing (22) with base (26) and wall (36). On one side (40) of the base, and facing the housing's interior, is a protuberance (42) in the form of a ridge protruding from the wall (30). The base protuberance has a star-shaped pattern of protruding designs (44).

IPC 8 full level

**F24H 1/26** (2006.01); **F24H 9/00** (2006.01)

CPC (source: EP)

**F24H 1/263** (2013.01)

Citation (examination)

- DE 19734814 C1 19990114 - WEBASTO THERMOSYSTEME GMBH [DE]
- US 2744516 A 19560508 - HUBBARD ARTHUR F

Cited by

EP1589298A3; EP2489534A1; CN102642455A; WO2016012514A3; US9482447B2

Designated contracting state (EPC)

CZ DE

DOCDB simple family (publication)

**EP 1296101 A2 20030326; EP 1296101 A3 20031210; EP 1296101 B1 20120620**; DE 10146610 A1 20030424

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**EP 02015117 A 20020705**; DE 10146610 A 20010921