

Title (en)  
Heater, especially for a vehicle

Title (de)  
Heizgerät, insbesondere für ein Fahrzeug

Title (fr)  
Appareil de chauffage, en particulier pour véhicule

Publication  
**EP 1589298 B1 20100707 (DE)**

Application  
**EP 05007314 A 20050404**

Priority  
DE 102004019870 A 20040423

Abstract (en)  
[origin: EP1589298A2] The heater has a burner chamber (12) for burning fuel and a tubular combustion product guide element (24) with inlet end (22) into which the combustion products enter on leaving the burner chamber. The guide element is closed at its outlet end (28) towards the longitudinal axis through a base wall (30) and has a number of outlet openings (32) through which the combustion products exit the guide element to enter the heat transfer flow chamber (54) which is defined by a heat exchanger arrangement (34). At least one part of the outlet openings provided in the outlet end area has different cross sectional shapes and/or different flow cross-sectional faces.

IPC 8 full level  
**F24H 1/26** (2006.01)

CPC (source: EP)  
**F24H 1/263** (2013.01)

Designated contracting state (EPC)  
CZ DE PL SE

DOCDB simple family (publication)  
**EP 1589298 A2 20051026; EP 1589298 A3 20060906; EP 1589298 B1 20100707;** DE 102004019870 A1 20051117;  
DE 502005009849 D1 20100819; RU 2005112099 A 20061027; RU 2290327 C1 20061227

DOCDB simple family (application)  
**EP 05007314 A 20050404;** DE 102004019870 A 20040423; DE 502005009849 T 20050404; RU 2005112099 A 20050422