

Title (en)  
BURNER FOR A HEATING DEVICE WITH IMPROVED FUEL SUPPLY IMPROVED HEAT SHIELD AND IMPROVED IMPACT DISC

Title (de)  
BRENNER FÜR EIN HEIZGERÄT MIT VERBESSERTER BRENNSTOFFZUFÜHRUNG, VERBESSERTEM HITZESCHILD UND VERBESSERTER PRALLSCHEIBE

Title (fr)  
BRULEUR POUR UN APPAREIL DE CHAUFFAGE, PRESENTANT UNE ALIMENTATION EN COMBUSTIBLE, UN ECRAN THERMIQUE ET UN DEFLECTEUR AMELIORES

Publication  
**EP 1812748 A1 20070801 (DE)**

Application  
**EP 05806922 A 20051116**

Priority  
• DE 2005002061 W 20051116  
• DE 102004055438 A 20041117

Abstract (en)  
[origin: WO2006053542A1] The invention relates to a burner for a heating device, in particular, for application in motor vehicles, comprising an essentially axially-symmetrical combustion chamber (22), a burner nozzle (12), for the introduction and atomisation of fuel, with a fuel lance (14), for the introduction of fuel into the combustion chamber (22) and a combustion air inlet (16), for the introduction of combustion air into the combustion chamber, a starting zone (18), in which an ignition of the fuel to start the burner (10) occurs, a heat shield (24), between the burner nozzle (12) and the combustion chamber (22), whereby the heat shield comprises openings (28, 30) for the introduction of secondary air into the combustion chamber and an impact disc (36), arranged in the combustion chamber. According to the invention, the exit speed of the fuel is determined by the selection of the inner diameter of the fuel lance (14), such that during a starting phase for the burner (10), fuel reaches the starting zone (18) in essentially non-atomised form, the openings are provided with air guide elements (28, 30) and the impact disc (36) has a given dome in the axial direction.

IPC 8 full level  
**F23D 9/00** (2006.01); **F23D 11/24** (2006.01); **F23D 11/40** (2006.01)

CPC (source: EP KR US)  
**F23D 9/00** (2013.01 - EP KR US); **F23D 11/24** (2013.01 - EP KR US); **F23D 11/40** (2013.01 - KR); **F23D 11/406** (2013.01 - EP US); **F23D 11/408** (2013.01 - EP US); **F23D 2900/11401** (2013.01 - EP US)

Citation (search report)  
See references of WO 2006053542A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2006053542 A1 20060526**; CA 2594577 A1 20060526; CN 101080595 A 20071128; DE 112005003411 A5 20071025; EP 1812748 A1 20070801; JP 2008520950 A 20080619; KR 20070086040 A 20070827; RU 2007122503 A 20081227; US 2009220901 A1 20090903

DOCDB simple family (application)  
**DE 2005002061 W 20051116**; CA 2594577 A 20051116; CN 200580043326 A 20051116; DE 112005003411 T 20051116; EP 05806922 A 20051116; JP 2007541671 A 20051116; KR 20077013152 A 20070611; RU 2007122503 A 20051116; US 71957205 A 20051116