

Title (en)  
Hybrid combustion boiler

Title (de)  
Hybrider Brennkessel

Title (fr)  
Chaudière à combustion hybride

Publication  
**EP 2045522 A1 20090408 (EN)**

Application  
**EP 07425621 A 20071005**

Priority  
EP 07425621 A 20071005

Abstract (en)  
A hybrid combustion boiler (100). The boiler (100) is characterized in that it comprises a hybrid atmospheric burner (10) having a catalytic element (11) crossed by a fuel-rich mixture. Between the catalytic element (11) and a heat exchanger (SC) there is a secondary air flow (F3) introduction pipe, so as to obtain a flame (FLM) given by the ignition of the reformed gas produced when the fuel-rich mixture crosses the catalytic element (11), so that the heat transfer to the heat exchanger (SC) occurs mainly by radiation IR throughout the visible and in the near infrared spectrum.

IPC 8 full level  
**F23D 14/14** (2006.01)

CPC (source: EP US)  
**F23D 14/145** (2013.01 - EP US); **F23D 2900/00001** (2013.01 - EP)

Citation (applicant)  
EP 1544542 A1 20050622 - RIELLO SPA [IT]

Citation (search report)  
• [YA] US 6145501 A 20001114 - MANOHAR SHAILESH SHARAD [US], et al  
• [YA] US 5848887 A 19981215 - ZABIELSKI MARTIN F [US], et al  
• [YD] EP 1544542 A1 20050622 - RIELLO SPA [IT]  
• [Y] JP S6030909 A 19850216 - MATSUSHITA ELECTRIC IND CO LTD

Cited by  
JP2012220135A

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
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