

Title (en)  
BURNER FOR THE COMBUSTION OF FUELS WITH REDUCED PRODUCTION OF NITRIC OXIDES

Publication  
**EP 0229231 B1 19900314 (DE)**

Application  
**EP 86113814 A 19861006**

Priority  
DE 3600665 A 19860113

Abstract (en)  
[origin: EP0229231A2] 1. Burner, for the combustion of liquid and/or gaseous fuels with reduced formation of nitrous oxides, in which burner lances (2, 3) are led through an air box (1) and surrounded by a first guide tube (5), the entry opening of which for primary air is provided within the air box (1) and the exit opening (6) of which is provided within the burner throat (7), which is separated from the air box (1) by a cover plate (9), wherein a secondary air duct feed is arranged within the burner throat (7), is connected at the entry side by way of tubes (18) with the air box (1) and has an exit cross-section lying downstream of the exit cross-section (6) of the first guide tube (5) and wherein a further guide tube is provided within the burner throat (7) and arranged for the conduction of recirculating flue gases at a radial spacing from the burner throat (7) and the first guide tube (5) and at an axial spacing from the cover plate (9) of the air box (1), characterised thereby, that the further guide tube consists of a muffle (13), which is built up of non-metallic sectors (14), which are resistant to corrosion and unaffected by changes in temperature and which are movable one relative to the other and form a self-supporting annular body, and that the muffle (13) is supported and fastened at the burner throat (7) and penetrated by the tubes (18), which form the secondary air guide and are of a material which is resistant to corrosion and unaffected by changes in temperature.

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**F23C 7/00**; **F23D 17/00**

IPC 8 full level  
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CPC (source: EP)  
**F23C 7/008** (2013.01); **F23D 17/002** (2013.01); **F23C 2900/06041** (2013.01); **F23C 2900/09002** (2013.01)

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