

Title (en)
Burner for the combustion of fuel

Title (de)
Brenner für die Verbrennung von Brennstoff

Title (fr)
Brûleur pour la combustion du combustible

Publication
EP 0881433 A2 19981202 (EN)

Application
EP 98304264 A 19980529

Priority
GB 9710949 A 19970529

Abstract (en)
A burner (10) for the combustion of fuel comprises a passage (22) through which in operation a mixed flow of fuel and air passes for primary combustion at its outlet. Two further annular passages (24 & 26), concentric with and radially outward of the passage (22) are provided through which supplementary flows of air pass to support primary combustion. The outlets of the two annular passages (24 & 26) diverge to discharge the supplementary flows of air at an angle to the mixed flow of fuel and air. An additional air passage (28) is provided radially outward of the passages (24 & 26). Air discharges from the air passage to adjust the effective angle of divergence of the supplementary flows of air which support combustion. The air discharged from the additional passage (28) controls the overall flame geometry to prevent interaction between flames from adjacent burners (10). The flame shape is optimised to meet the furnace geometry leading to a reduction of pollutant emissions. <IMAGE>

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F23D 1/02; **F23C 7/02**

IPC 8 full level
F23C 7/02 (2006.01); **F23D 1/02** (2006.01)

CPC (source: EP)
F23C 7/02 (2013.01); **F23D 1/02** (2013.01)

Citation (applicant)
• EP 0667488 A2 19950816 - ROLLS ROYCE POWER ENG [GB]
• EP 0343767 A1 19891129 - NORTHERN ENG IND [GB]

Cited by
CN107101199A

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EP 0881433 A2 19981202; **EP 0881433 A3 19990922**; GB 2325729 A 19981202; GB 9710949 D0 19970723

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