

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 A3 19990922 (EN)

Application

EP 98304264 A 19980529

Priority

GB 9710949 A 19970529

Abstract (en)

[origin: EP0881433A2] 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 or 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>

IPC 1-7

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 (search report)

- [DY] EP 0667488 A2 19950816 - ROLLS ROYCE POWER ENG [GB]
- [Y] US 4690074 A 19870901 - NORTON CHARLES L [US]
- [A] FR 2522392 A1 19830902 - SUMITOMO METAL IND [JP]
- [A] US 4373900 A 19830215 - ECKELMANN GUENTHER [DE]

Cited by

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