

Title (en)  
BURNER

Publication  
**EP 0276398 B1 19901010 (DE)**

Application  
**EP 87117120 A 19871120**

Priority  
DE 3702415 A 19870128

Abstract (en)  
[origin: EP0276398A2] 1. Burner with a central fuel duct (12) and a feed tube (1) for combustion air, which tube is closed at one end by a closure body (4) displaying a central passage opening (5), wherein a swirl body (7) for the production of a rapidly rotating air whirl is arranged in the guide tube (1), the swirl body (7) with the closure body (4) forms a radial gap (10) extending perpendicularly to the axis of the guide tube (1), the passage opening (5) of the closure body (4) displays a first portion (15), which is dimensioned in such a manner that the flow speed corresponds to at least three times the flame propagation velocity and which is adjoined by a second widening portion (16), the greatest dimension of which is dimensioned in such a manner that the flow speed at the end of this portion (16) is smaller than the flame propagation velocity, characterised thereby, that the fuel duct (12) conducting a gaseous fuel displays lateral exit openings (14), which are arranged in the under-pressure zone of the air whirl establishing itself in the first portion (15) of the passage opening (5), and that the first portion (15) enlarges conically and the second portion (16) adjoining thereat enlarges in bell shape in the direction of the fuel flow, wherein a flame holder (17) is arranged behind the second portion.

IPC 1-7  
**F23D 14/24**

IPC 8 full level  
**F23D 14/24** (2006.01); **F23D 14/74** (2006.01)

CPC (source: EP)  
**F23D 14/24** (2013.01); **F23D 14/74** (2013.01)

Cited by  
FR2729743A1; GB2337102A; US6151899A; EP0486169A3; US6729874B2; WO0210645A3

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AT CH DE FR IT LI SE

DOCDB simple family (publication)  
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