

Title (en)  
BURNER WITH A PRIORILY MIXTURE AND AN INTEGRATED PILOT-FLAME

Publication  
**EP 0178198 B1 19900718 (FR)**

Application  
**EP 85401683 A 19850826**

Priority  
FR 8413603 A 19840904

Abstract (en)  
[origin: EP0178198A2] 1. A burner with integral premixing, of the type comprising three coaxial tubes, namely an outer tube (10) into which the combustive air flows, an intermediate tube (12) into which enters the combustion gas and an innermost tube (14) in which combustive air also circulates, characterised in that : air penetrates tangentially into the outer tube (10) in the vicinity of one of its ends which is closed by an end wall (16), the air being divided into three streams which respectively pass through the three tubes with a spiral movement, the gas penetrates radially into the intermediate tube (12) likewise in the vicinity of its end near to the end wall and forms with the air passing therethrough a non-inflammable premixture, the intermediate tube and the innermost tube are open at both ends and terminate at one end at a predetermined distance from the end wall, the outer tube (10) is provided, slightly downstream of the outlet end of the intermediate tube, with first deflection means (18) which can direct the outer air stream radially towards the burner axis, second deflection means (38) are provided to direct axially the premixture at its outlet from the intermediate tube so that it intersects the outer air stream practically at right angles.

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IPC 8 full level  
**B01F 5/04** (2006.01); **F23D 14/02** (2006.01); **F23D 14/62** (2006.01)

CPC (source: EP)  
**B01F 25/31** (2022.01); **F23D 14/02** (2013.01); **F23D 14/62** (2013.01)

Cited by  
FR2772461A1; EP1036984A1; FR2889292A1; EA012937B1; WO2007012755A1; WO8706998A1

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