

Title (en)  
Dual combustor.

Title (de)  
Dualbrenner.

Title (fr)  
Chambre de combustion double.

Publication  
**EP 0210462 A1 19870204 (DE)**

Application  
**EP 86109039 A 19860702**

Priority  
CH 328985 A 19850730

Abstract (en)  
[origin: US4781030A] In the dual burner of a gas turbine or a hot gas generating system, the swirler (1) is formed from at least two doubly curved sheets (4, 5) subject to tangential air inlet (7). These sheets (4, 5) are folded along diagonals (10a, 10b) running conically outwards in the outlet flow direction. One curved fold face forms an inner cone (4b, 5b) expanding in the direction of the swirler outlet end while the other curved fold face forms an outer cone (4a, 5a) which contracts in the direction of the end outlet. The inner cones (4b, 5b) each carry at their ends a fuel main (8) whose fuel nozzles (9) are directed radially inwards towards the inner zone of the swirler (1). The liquid fuel (2a, 2b) is directed onto the outer cone (4a, 5a), the oil film (6) forming there being "rolled in" by the air (7) flowing into the outer cone (4a, 5a).

Abstract (de)  
Beim Dualbrenner einer Gasturbine oder einer Heissgaserzeugung wird der Drallkörper (1) aus mindestens zwei mit tangentialen Lufteintritt (7) beaufschlagten doppeltgekrümmten Blechen (4, 5) gebildet. Diese Bleche (4, 5) sind entlang in Abströmungsrichtung kegelstrahlend nach aussen verlaufenden Diagonalen (10a, 10b) gefalzt. Die eine gekrümmte Falzseite bildet einen in Abströmungsrichtung sich erweiternden Innenkegel (4b, 5b), während die andere gekrümmte Falzseite einen in Abströmungsrichtung sich verjüngenden Aussenkegel (4a, 5b) bildet. Die Innenkegel (4b, 5b) tragen endseitig je eine Brennstoffleitung (8), deren Brennstoffdüsen (9) gegen den Innenraum des Drallkörpers (1) gerichtet sind. Der flüssige Brennstoff ist auf die Aussenkegel (4a, 5a) gerichtet, wobei der dort sich bildende Ölfilm (6) von der in die Aussenkegel (4a, 5a) einströmenden Luft (7) "eingerollt" wird.

IPC 1-7  
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IPC 8 full level  
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