

Title (en)

Fuel injection system for a combustion chamber

Title (de)

Brennstoffeinspritzsystem für eine Brennkammer

Title (fr)

Système d'injection de carburant pour une chambre de combustion

Publication

EP 0828115 B1 20030813 (FR)

Application

EP 97402058 A 19970904

Priority

FR 9610823 A 19960905

Abstract (en)

[origin: EP0828115A1] A fuel/air injector consists of an axial fuel injector (2), a coaxial Venturi tube (6) forming a pre-mix chamber (3), a divergent outlet (8) with a ring (9) for fixing to the tube (6), and an atomising air inlet. The atomising air inlet is equipped with a radial swirler (10) with a high level of permeability, situated in front of the Venturi tube (6) and providing a primary fuel/air mix. A second radial swirler with a series of channels (16a, 16b) is situated round the forward end of the tube with outlets in its convergent section to ensure a homogenous carburation of the fuel inside the tube. A third swirler (18a, 18b) is located round the rear end of the tube and has axial outlets which alternate in a circumferential direction with the radial outlets of the second swirler.

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