

Title (en)

Device for injecting a mixture of air and fuel into a combustion chamber of a turbomachine

Title (de)

Vorrichtung zum Einspritzen eines Gemisches aus Luft und Brennstoff in eine Brennkammer eines Turbotriebwerks

Title (fr)

Système d'injection d'un mélange d'air et de carburant dans une chambre de combustion de turbomachine

Publication

EP 2071242 B1 20170802 (FR)

Application

EP 08169015 A 20081113

Priority

FR 0708703 A 20071214

Abstract (en)

[origin: EP2071242A1] The system (32) has a venturi (56) placed downstream of a fuel injector head (36) and co-axial to the head. The venturi has an inner surface (72) defining a pre-mixing chamber (74) in which fuel and air flow that is provoked from an external enclosure (46) are mixed. The venturi has an annular internal cavity (84) for air circulation and connected by air intake conduits (92) and supplementary air intake conduits to the enclosure and by air outlet conduits (94) to the chamber. The outlet conduits open on the surface for preventing deposition of soot and formation of coke on the surface.

IPC 8 full level

F23R 3/14 (2006.01)

CPC (source: EP US)

F23R 3/14 (2013.01 - EP US); **F23R 2900/03041** (2013.01 - EP US)

Citation (opposition)

Opponent : United Technologies Corporation

- US 3811278 A 19740521 - TAYLOR J, et al
- US 4809512 A 19890307 - BARBIER GERARD Y G [FR], et al
- US 5603211 A 19970218 - GRAVES CHARLES B [US]
- US 3570242 A 19710316 - LEONARDI SALVATORE A, et al

Cited by

FR3033030A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 2071242 A1 20090617; EP 2071242 B1 20170802; CA 2646959 A1 20090614; CA 2646959 C 20161018; FR 2925146 A1 20090619; FR 2925146 B1 20091225; JP 2009145039 A 20090702; JP 5260245 B2 20130814; RU 2008149163 A 20100620; RU 2478878 C2 20130410; US 2009151357 A1 20090618; US 8312723 B2 20121120

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EP 08169015 A 20081113; CA 2646959 A 20081210; FR 0708703 A 20071214; JP 2008301971 A 20081127; RU 2008149163 A 20081212; US 33373208 A 20081212