

Title (en)

Fuel injection device for a gas turbine combustion chamber with a liquid cooled injection nozzle

Title (de)

Kraftstoffeinspritzvorrichtung für eine Gasturbinen-Brennkammer mit einer flüssigkeitsgekühlten Einspritzdüse

Title (fr)

Dispositif d'injection du combustible pour une chambre de combustion d'une turbine à gaz avec une buse d'injection refroidie par un liquide

Publication

EP 0841517 B1 20011219 (DE)

Application

EP 97114341 A 19970820

Priority

DE 19645961 A 19961107

Abstract (en)

[origin: EP0841517A2] The nozzle (1) has a coolant tube (10) enclosing and clear of its fuel tube (4), and which leads near the nozzle outlet (7) into an annular chamber (9) directly enclosing the fuel tube. Inside the coolant tube and upstream of the annular chamber when seen in the fuel-flow direction is a partition (11) enclosing the fuel tube. This divides the coolant tube interior into first and second segments (12a,12b) connected respectively to coolant feed (13) and discharge (14) passages. The coolant tube can be mounted directly in a nozzle holder, while the fuel tube is mounted via an angle-piece (19) in the holder. A first coolant passage in the holder leads into the coolant tube, while a fuel feed passage (3) leads into the hollow angle-piece.

IPC 1-7

F23D 11/36; **F23D 11/24**

IPC 8 full level

F23D 11/24 (2006.01); **F23D 11/36** (2006.01)

CPC (source: EP US)

F23D 11/24 (2013.01 - EP US); **F23D 11/36** (2013.01 - EP US); **F23D 2206/10** (2013.01 - EP US); **F23D 2214/00** (2013.01 - EP US)

Cited by

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DE FR GB

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EP 0841517 A2 19980513; **EP 0841517 A3 19981223**; **EP 0841517 B1 20011219**; CA 2220213 A1 19980507; CA 2220213 C 20060404; DE 19645961 A1 19980514; DE 59705876 D1 20020131; US 6003781 A 19991221

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EP 97114341 A 19970820; CA 2220213 A 19971105; DE 19645961 A 19961107; DE 59705876 T 19970820; US 96623997 A 19971107