Title (en)

FUEL INJECTION ASSEMBLY FOR GAS TURBINE ENGINE COMBUSTOR

Title (de)

BRENNSTOFFEINSPRITZVORRICHTUNG FÜR EINE GASTURBINENBRENNKAMMER

Title (fr)

ENSEMBLE D'INJECTION DE COMBUSTIBLE POUR CHAMBRE A COMBUSTION DE TURBINE A GAZ

Publication

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Application

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Abstract (en)

[origin: WO0022347A1] A fuel injection assembly (174) for a gas turbine engine combustor, including at least one fuel stem (186), a plurality of concentrically disposed tubes (192, 194, 196) positioned within each fuel stem, wherein a cooling supply flow passage (198), a cooling return flow passage (200), and a tip fuel flow passage (202) are defined thereby, and at least one fuel tip assembly (190) connected to each fuel stem (186) so as to be in flow communication with the flow passages, wherein an active cooling circuit for each fuel stem (186) and fuel tip assembly (190) is maintained by providing all active fuel through the cooling supply flow passage (198) and the cooling return flow passage (200) during each stage of combustor operation. The fuel flowing through the active cooling circuit is then collected so that a predetermined portion thereof is provided to the tip fuel flow passage (202) for injection by the fuel tip assembly (190).

IPC 8 full level

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