

Title (en)

Turbine combustor having more uniform mixing of fuel and air for improved downstream combustion.

Title (de)

Brennkammer für eine Turbine mit gleichmässigerer Durchmischung von Brennstoff und Luft für verbesserte stromabwärtige Verbrennung.

Title (fr)

Chambre de combustion pour turbine ayant un mélange assez uniforme de carburant et d'air pour combustion en aval perfectionnée.

Publication

EP 0103159 A1 19840321 (EN)

Application

EP 83107832 A 19830809

Priority

US 40968282 A 19820819

Abstract (en)

A combustor (10) for a structure with a land based combustion turbine, comprises a generally tubular sidewall (12) having a downstream-mixing zone (34) where a mixture of fuel and air is developed for downstream combustion, said tubular structure further having an upstream primary zone (22) into which air is admitted through sidewall openings to develop an axial airflow for mixing with downstream injection fuel, means (32) for spraying fuel in the form of small rapidly evaporable droplets generally radially inwardly of the tubular structure through said sidewall (12) at a location between said primary zone (22) and said mixing zone (34) for mixing with the primary air flow, a catalyst (28) is disposed in the combustor tubular structure at the outlet of said mixing zone (34), a plurality of circumferentially disposed air scoops (36) are located in upstream proximity to said fuel spraying means (32) and directed downstream to produce said booster air streams.

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F23R 3/06

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CPC (source: EP)

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Citation (search report)

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EP 0103159 A1 19840321; **EP 0103159 B1 19870107**; AR 229741 A1 19831031; CA 1209813 A 19860819; DE 3368974 D1 19870212; IE 54394 B1 19890913; IE 831719 L 19840219; JP S5944524 A 19840313; JP S622216 B2 19870119; MX 156751 A 19880929

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