

Title (en)
Gas turbine with toroidal combustor

Title (de)
Gasturbine mit toroidaler Brennkammer

Title (fr)
Turbine à gaz avec chambre de combustion toroidale

Publication
EP 0870990 A1 19981014 (DE)

Application
EP 97810167 A 19970320

Priority
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Abstract (en)
The combustion chamber (1) has at least one annular toroidal interior (8) actively connected to burners (5) around the periphery of the combustion chamber. The toroidal interior has a hot gas duct (11) branching off in a peripheral direction and positioned on the flow plane of a turbine (3) placed after the gas turbo group. The end of the hot gas duct has guide-blades (12) co-operating with the turbine. The annular toroidal interior is enclosed in a shell (13) in which flows a coolant (15) in the intermediate space (14) formed. Combustion air (7) belonging to a plenum (6) feeds the burners.

Abstract (de)
Bei einer Brennkammer einer Gasturbogruppe weist der Innenraum (8) dieser Brennkammer (1) eine ringförmig toroidale Form auf. Auf den Umfang dieser Brennkammer sind eine Anzahl mit dem Innenraum in Wirkverbindung stehenden Brenner (5) angeordnet, welche eine Drallströmung (9) auslösen. Diese bildet dann ihrerseits einen Vortex-Kern (10), der die Stabilität der Flammenfront gewährleistet. <IMAGE>

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F23R 3/52

IPC 8 full level
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CPC (source: EP US)
F23R 3/425 (2013.01 - EP US); **F23R 3/52** (2013.01 - EP US)

Citation (search report)

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