

Title (en)

Combustor with integrated guide vanes

Title (de)

Brennkammer mit integrierten Leitschaufeln

Title (fr)

Chambre de combustion avec aubes de guidage intégrées

Publication

EP 0848210 A3 19991117 (DE)

Application

EP 97810854 A 19971111

Priority

DE 19651881 A 19961213

Abstract (en)

[origin: EP0848210A2] The turbine has guide vanes (1.1), between the combustion chamber and turbine are each integrated into a combustion chamber (1.2). The guide vanes and the wall (1.2.1) of the combustion chamber are in one piece and form a unit. The combustion chamber wall and the integral guide vanes sit in parts of the cold support structures (3.1) of the gas turbine unit and form cooling-air ducts (4) running partly inside the guide vanes. The inflow opening (4.1) of the cooling-air ducts is positioned near the guide vanes so that the combustion chamber wall is formed for a counterflow cooling of the combustion chamber. The guide valves have guides (4.2) for the cooling air in the ducts.

IPC 1-7

F23R 3/16; F01D 9/02

IPC 8 full level

F01D 9/02 (2006.01); **F01D 9/04** (2006.01); **F02C 3/14** (2006.01); **F02C 7/00** (2006.01); **F23R 3/16** (2006.01)

CPC (source: EP US)

F01D 9/023 (2013.01 - EP US); **F01D 9/044** (2013.01 - EP US)

Citation (search report)

- [XY] US 3608310 A 19710928 - VAUGHT JOHN M
- [Y] US 2844001 A 19580722 - ALFORD JOSEPH S
- [XY] DE 1108516 B 19610608 - BRISTOL SIDDELEY ENGINES LTD
- [XY] DE 1245644 B 19670727 - ROLLS ROYCE
- [XY] DE 1476887 B1 19690911 - ROLLS ROYCE
- [XY] DE 1476892 A1 19700716 - ROLLS ROYCE
- [XY] US 3353351 A 19671121 - ARTHUR BILL, et al
- [A] DE 1240706 B 19670518 - ROLLS ROYCE

Cited by

EP2730747A1

Designated contracting state (EPC)

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EP 0848210 A2 19980617; EP 0848210 A3 19991117; EP 0848210 B1 20030416; CA 2219421 A1 19980613; CA 2219421 C 20070424;
CN 1130522 C 20031210; CN 1188210 A 19980722; DE 19651881 A1 19980618; DE 59709849 D1 20030522; JP H10184387 A 19980714;
TW 374821 B 19991121; US 5953919 A 19990921

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JP 34323797 A 19971212; TW 86115971 A 19971028; US 96686597 A 19971110