

Title (en)

GAS TURBINE ENGINE WITH HIGH SPEED LOW PRESSURE TURBINE SECTION AND BEARING SUPPORT FEATURES

Title (de)

GASTURBINENMOTOR MIT SCHNELLEM NIEDERDRUCKTURBINENABSCHNITT UND LAGERTRÄGERFUNKTIONEN

Title (fr)

MOTEUR À TURBINE À GAZ PRÉSENTANT UNE SECTION DE TURBINE BASSE PRESSION À GRANDE VITESSE ET ÉLÉMENTS DE SUPPORT DE PALIER

Publication

EP 2841718 A2 20150304 (EN)

Application

EP 13822569 A 20130423

Priority

- US 201213455235 A 20120425
- US 201213558605 A 20120726
- US 2013037675 W 20130423

Abstract (en)

[origin: WO2014018142A2] A gas turbine engine includes a very high speed low pressure turbine such that a quantity defined by the exit area of the low pressure turbine multiplied by the square of the low pressure turbine rotational speed compared to the same parameters for the high pressure turbine is at a ratio between about 0.5 and about 1.5. The high pressure turbine is supported by a bearing positioned at a point where the first shaft connects to a hub carrying turbine rotors associated with the second turbine section.

IPC 8 full level

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CPC (source: EP)

F01D 25/162 (2013.01); **F02C 3/107** (2013.01); **F02C 7/06** (2013.01); **F02K 3/06** (2013.01)

Citation (third parties)

Third party : Mike Burke

- D.E.GRAY ET AL.: "NASA", UNITED TECHNOLOGIES CORPORATION, article "Energy Efficient Engine Preliminary Design and Integration Studies"
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Third party : Rolls-Royce plc /Mike Burke/

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Designated contracting state (EPC)

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Designated extension state (EPC)

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