

Title (en)

Thermostructural composite material rotor, particularly of large diameter and its method of manufacturing

Title (de)

Rotor aus thermostrukturellem Verbundmaterial, insbesondere mit grossem Diameter und sein Herstellungsverfahren

Title (fr)

Turbine en matériau composite thermostructural, en particulier à grand diamètre, et procédé pour sa fabrication

Publication

**EP 0761978 B1 20011031 (FR)**

Application

**EP 96401836 A 19960828**

Priority

FR 9510206 A 19950830

Abstract (en)

[origin: EP0761978A1] The procedure consists of making a hub, flanges and blades from a thermo-structural composition material. The hub is made from a series of flat annular plates (21) which are fixed relative to one another. The blades are made individually from a two-dimensional fibrous material in plate or sheet form. Each blade is made in a pre-form which is compressed in a matrix to make a blank and then machines to the required shape. The two turbine flanges are also made from pre-forms of annular shape, essentially two-dimensional and compressed in a matrix, and when all the components have been made they are assembled, connecting each blade to the hub by inserting the blade foot (13) into a radial slot (23) of corresponding shape in the hub. The turbine components are made from a composition material such as carbon/carbon, or carbon fibres and a matrix of silicon carbide.

IPC 1-7

**F04D 29/02**; **F04D 29/28**; **F01D 5/34**

IPC 8 full level

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CPC (source: EP US)

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Cited by

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DE ES FR GB IT

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**EP 0761978 A1 19970312**; **EP 0761978 B1 20011031**; CA 2184522 A1 19970301; CN 1148673 A 19970430; DE 69616460 D1 20011206; DE 69616460 T2 20020718; ES 2165964 T3 20020401; FR 2738304 A1 19970307; FR 2738304 B1 19971128; JP H09105304 A 19970422; RU 2135779 C1 19990827; UA 28035 C2 20001016; US 5845398 A 19981208; US 5944485 A 19990831

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