

Title (en)

Steam turbine rotor with mechanically coupled high and low temperature sections using different materials

Title (de)

Dampfturbinenrotor mit mechanisch gekoppelten Hoch- und Niedertemperaturabschnitten durch die Verwendung unterschiedlicher Materialien

Title (fr)

Rotor de turbine à vapeur avec sections à température élevée et basse couplée mécaniquement utilisant différents matériaux

Publication

EP 2479377 A2 20120725 (EN)

Application

EP 11195293 A 20111222

Priority

US 98550811 A 20110106

Abstract (en)

A turbine rotor including an elongated shaft having at least an HP region 12, the HP region having a first section supporting a stage 1 rotor wheel 14 and a second section supporting a stage 2 rotor wheel 16, the first section formed of a relatively higher-temperature-capability material and the second section formed of a relatively lower-temperature-capability material. Various mechanical couplings 26, 28, 30, 32 are described for securing the first and second sections.

IPC 8 full level

F01D 5/02 (2006.01); **F01D 5/06** (2006.01)

CPC (source: EP US)

F01D 5/026 (2013.01 - EP US); **F01D 5/066** (2013.01 - EP US); **F05D 2300/502** (2013.01 - EP US); **F05D 2300/50212** (2013.01 - EP US)

Cited by

CN112678148A; IT201600069753A1; US11021960B2; WO2018007909A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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