

Title (en)
SUPERHIGH TEMPERATURE AND PRESSURE STEAM TURBINE

Publication
EP 0067526 B1 19861126 (EN)

Application
EP 82302419 A 19820512

Priority
JP 7083481 A 19810513

Abstract (en)
[origin: EP0067526A1] In a superhigh temperature and pressure steam turbine including a casing, blades in the casing receiving streams of steam jets for rotation, and a rotor shaft supporting the blades for rotation, wherein the casing includes an inner casing member having static blades secured thereto for guiding the streams of steam jets and an outer casing member enclosing the inner casing member, the rotor shaft is formed of an alloy consisting essentially, by weight, of less than 0.04% C, not more than 2% Mn, not more than 1.5% Si, 10-20% Cr, 20-30% Ni, 0.5-3% Mo, 0.5-3% Ti, 0.1-0.5% Al, 0.002-0.01% B and the balance Fe and inevitable impurities. The alloy has a microstructure in which a gamma min phase is precipitated in austenite matrix, whereby the rotor shaft has superior high temperature creep strength and excellent thermal fatigue resistant property.

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C22C 38/54

IPC 8 full level
F01D 5/02 (2006.01); **C22C 38/00** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP)
C22C 38/54 (2013.01)

Cited by
EP0669405A3; US7238005B2; US7850424B2

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EP 0067526 A1 19821222; EP 0067526 B1 19861126; DE 3274468 D1 19870115; JP S57188656 A 19821119

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