

Title (en)
Steam-turbine power plant and steam turbine

Title (de)
Dampfturbinenkraftanlage und Dampfturbine

Title (fr)
Installation de turbines à vapeur et turbine à vapeur

Publication
EP 0759499 B1 20020227 (EN)

Application
EP 95113119 A 19950821

Priority
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Abstract (en)
[origin: EP0759499A1] A steam turbine in which principal components to be exposed to high temperatures are all made of ferritic steel, whereby the temperatures of main steam and reheat steam can be increased to 610 - 660 (DEG C). The rotor shaft (23 in Fig. 1) of the steam turbine is made of ferritic forged steel whose 100,000-hour creep rupture strength is at least 15 (kg/mm<2>) at the service temperature of the rotor shaft. Likewise, the casing (18) is made of ferritic cast steel whose 100,000-hour creep rupture strength is at least 10 (kg/mm<2>). The steam turbine of high thermal efficiency can be applied to a steam-turbine power plant.

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F01D 5/28 (2006.01)

CPC (source: EP)
F01D 5/28 (2013.01)

Citation (examination)
Toshio Fujita: 'Current progress in 9-12% Cr ferritic heat restant steels', Third International Charles Parson Turbine Conference, Materials Engineering in Trurbines and compressors, 25-28 April 1995; Civic Centre, Newcastle Upon Tyne, UK, Conference Proc eedings, Volume Two, pages 493-516

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US7404699B2; EP1849881A3; EP2671959A1; EP2671957A3; EP2623713A1; CN109356663A; EP1559872A1; CN100404794C; EP0767250A3; US5961284A; FR2823226A1; AU2002302671B2; CN1317415C; CZ299079B6; AU2002302671B8; US7651318B2; US9297277B2; US9039365B2; WO2005073517A1; WO02081766A1

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