

Title (en)  
ROTOR FOR LOW-PRESSURE TURBINE

Title (de)  
ROTOR FÜR EINE NIEDERDRUCKTURBINE

Title (fr)  
ROTOR POUR TURBINE BASSE PRESSION

Publication  
**EP 2312127 A4 20150107 (EN)**

Application  
**EP 09806066 A 20090730**

Priority  
• JP 2009063896 W 20090730  
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Abstract (en)  
[origin: US2010202891A1] The object of the invention is to provide a low-pressure turbine rotor capable of maintaining mechanical strength characteristics, and without problems in terms of quality without increasing manufacturing costs and manufacturing days, even if high temperature steam is introduced into the low-pressure turbine. A low-pressure turbine rotor used in a steam turbine facility including a high-pressure turbine, an intermediate-pressure turbine, and a low-pressure turbine includes a member formed from 1CrMoV steel, 2.25CrMoV steel, or 10CrMoV steel arranged on a steam inlet side, and a member formed from 3.5Ni steel arranged on a steam outlet side, which are joined together by welding. Alternatively, the member arranged on the steam inlet side and the member arranged on the steam outlet side, both of which are formed from 3.5Ni steel, are joined together by welding, and the member arranged on the steam inlet side is made of low-impurity 3.5Ni steel containing, by weight %, Si: 0.1% or less, Mn: 0.1% or less, and inevitable impurities containing, by weight %, P: 0.02% or less, S: 0.02% or less, Sn: 0.02% or less, As: 0.02% or less, Sb: 0.02% or less, Al: 0.02% or less, and Cu: 0.1% or less.

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Citation (search report)  
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• [I] WO 2007073976 A1 20070705 - ALSTOM TECHNOLOGY LTD [CH], et al  
• [A] US 4962586 A 19901016 - CLARK ROBERT E [US], et al  
• [A] EP 1911932 A2 20080416 - TOSHIBA KK [JP]  
• [A] EP 0964135 A2 19991215 - MITSUBISHI HEAVY IND LTD [JP]  
• See references of WO 2010018773A1

Citation (examination)  
EP 1672173 A2 20060621 - TOSHIBA KK [JP]

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