

Title (en)

INTERNALLY COOLED STEAM TURBINE SHAFT AND METHOD FOR COOLING THE SAME

Title (de)

TURBINENWELLE EINER DAMPFTURBINE MIT INTERNER KÜHLUNG SOWIE VERFAHREN ZUR KÜHLUNG EINER TURBINENWELLE

Title (fr)

ARBRE DE TURBINE A VAPEUR AVEC REFROIDISSEMENT INTERNE ET PROCEDE POUR REFROIDIR UN ARBRE DE TURBINE

Publication

EP 0991850 A1 20000412 (DE)

Application

EP 98936164 A 19980615

Priority

- DE 9801618 W 19980615
- DE 19727406 A 19970627

Abstract (en)

[origin: US6227799B1] A turbine shaft for a steam turbine, in particular having a high-pressure and an intermediate-pressure turbine section. The turbine shaft has in its interior a cooling line for passing cooling steam. The cooling line is connected, on the one hand, to an outflow line and, on the other hand, to an inflow line. In this way, steam cooling of the turbine shaft can be achieved by feeding steam from the high-pressure turbine section via the inflow line to the intermediate-pressure turbine section through the outflow line. The invention also relates to a method of cooling a turbine shaft of a steam turbine.

IPC 1-7

F01D 5/08; **F01D 25/12**

IPC 8 full level

F01D 5/08 (2006.01); **F01D 25/12** (2006.01)

CPC (source: EP US)

F01D 5/081 (2013.01 - EP US); **F01D 5/085** (2013.01 - EP US); **F01D 25/125** (2013.01 - EP US); **F05D 2220/72** (2013.01 - EP US)

Cited by

EP1911933A1; EP1905949A1; US7267525B2; US8128341B2; WO2008043663A1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI PT SE

DOCDB simple family (publication)

WO 9900583 A1 19990107; AT E213305 T1 20020215; CN 1143945 C 20040331; CN 1261420 A 20000726; DE 59803075 D1 20020321; EP 0991850 A1 20000412; EP 0991850 B1 20020213; ES 2172905 T3 20021001; JP 2002508044 A 20020312; JP 4162724 B2 20081008; PT 991850 E 20020731; US 6227799 B1 20010508

DOCDB simple family (application)

DE 9801618 W 19980615; AT 98936164 T 19980615; CN 98806546 A 19980615; DE 59803075 T 19980615; EP 98936164 A 19980615; ES 98936164 T 19980615; JP 50520799 A 19980615; PT 98936164 T 19980615; US 47221899 A 19991227