

Title (en)

High-temperature steam turbine power plant with double reheat

Title (de)

Hochtemperatur-Dampfturbinenkraftwerk mit doppelter Zwischenüberhitzung

Title (fr)

Installation de turbine à vapeur haute température à double réchauffage

Publication

EP 2666977 A1 20131127 (EN)

Application

EP 12168611 A 20120521

Priority

EP 12168611 A 20120521

Abstract (en)

A steam power plant is described including on a single rotor (17) at least one high pressure turbine (14) or turbine section having a steam exit connected in operation to a first steam reheater (151) and at least two intermediate pressure turbines (161, 162) or turbine sections with a first (161) of the at least two intermediate pressure turbines or turbine sections having a steam exit connected in operation to a second steam reheater (152) and with a second (162) of the at least two intermediate pressure turbines or turbine sections having a steam entry to receive steam from the second steam reheater (152) and a steam exit connected to one or more low pressure turbines (163) or turbine sections, whereby the at least two intermediate pressure turbines (161, 162) or turbine sections are each separated into a high temperature turbine (161-1, 162-1) or turbine section and into a low temperature turbine (161-2, 162-2) or turbine section.

IPC 8 full level

F01K 7/22 (2006.01); **F01D 3/02** (2006.01)

CPC (source: EP US)

F01K 7/22 (2013.01 - EP US); **F01K 21/00** (2013.01 - US)

Citation (applicant)

- US 2008250790 A1 20081016 - IMANO SHINYA [JP], et al
- R. BLUM; J. BUGGE; S. KJAER: "AD700 innovations pave the way for 53 per cent efficiency", MODERN POWER SYSTEMS, November 2008 (2008-11-01), pages 15 - 19

Citation (search report)

- [XY] EP 1445429 A1 20040811 - ELSAM ENGINEERING AS [DK]
- [Y] DE 1027210 B 19580403 - SIEMENS AG
- [Y] EP 2180149 A1 20100428 - MITSUBISHI HEAVY IND LTD [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2666977 A1 20131127; CN 103422918 A 20131204; CN 103422918 B 20150812; JP 2013241934 A 20131205; JP 5726233 B2 20150527; US 2013305719 A1 20131121

DOCDB simple family (application)

EP 12168611 A 20120521; CN 201310189114 A 20130521; JP 2013106804 A 20130521; US 201313895887 A 20130516