

Title (en)

System and method for temperature control of reheated steam

Title (de)

System und Verfahren zur Temperatursteuerung eines wieder aufgeheizten Dampfes

Title (fr)

Système et procédé pour le contrôle de la température de vapeur réchauffée

Publication

EP 2698507 A1 20140219 (EN)

Application

EP 12180786 A 20120817

Priority

EP 12180786 A 20120817

Abstract (en)

A temperature control system, particularly for low load conditions, is described including a by-pass line (132) with a by-pass control valve (133) branching off a live steam circuit (13) to a first steam turbine (14) in a sequence of at least two steam turbines (14, 18), with a steam exit line of the first turbine merging with the by-pass line into the inlet of a reheat (16) heated by a steam generator (10) and connected to a second steam turbine (18) of the sequence of at least two steam turbines, and having a steam mixing chamber (151) at or after the point of merging and before the inlet into the reheat. The desired temperature is set by controlling the mass flow through the by-pass line and/or the first turbine.

IPC 8 full level

F01K 7/22 (2006.01); **B01F 5/00** (2006.01); **F01K 7/24** (2006.01); **F22G 5/14** (2006.01)

CPC (source: EP)

F01K 7/22 (2013.01); **F01K 7/226** (2013.01); **F01K 7/24** (2013.01); **F22G 5/14** (2013.01)

Citation (applicant)

US 5605118 A 19970225 - SINN BRIAN T [US], et al

Citation (search report)

- [X] JP S5810104 A 19830120 - HITACHI LTD
- [X] DE 3149772 A1 19820729 - GEN ELECTRIC [US]
- [XY] DE 821790 C 19511119 - BORSIG A G
- [Y] SU 1554954 A1 19900407 - KULANDIN ARKADIJ A [SU], et al
- [Y] JP 2012135737 A 20120719 - SHIMADZU CORP
- [A] US 4455836 A 19840626 - BINSTOCK MORTON H [US], et al

Cited by

CN108836110A; CN105781630A; CN114635766A; CN108474268A; CN110529210A; BE1030715B1; CN103925021A; JP2018063063A; US10808578B2; WO2024013695A1

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 2698507 A1 20140219; EP 2698507 B1 20170301; WO 2014026995 A2 20140220; WO 2014026995 A3 20140807

DOCDB simple family (application)

EP 12180786 A 20120817; EP 2013066929 W 20130813