

Title (en)
STEAM TURBINE SYSTEM FOR A POWER PLANT

Title (de)
DAMPFTURBINENSYSTEM FÜR EIN KRAFTWERK

Title (fr)
SYSTÈME DE TURBINE À VAPEUR POUR CENTRALE ÉLECTRIQUE

Publication
EP 2288793 A2 20110302 (DE)

Application
EP 09733333 A 20090402

Priority
• EP 2009053924 W 20090402
• EP 08007316 A 20080414
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Abstract (en)
[origin: WO2009127523A2] A steam turbine system for a power plant comprises a steam turbine, which at the fresh steam inlet comprises a fresh steam control valve and has a tap steam outlet, and a fresh steam bypass line having a regulating valve, said line at the inlet of the fresh steam control valve and at the steam outlet being connected to the tap steam outlet for conducting fresh steam regulated with the regulating valve upstream of the fresh steam valve, wherein the steam turbine having the fresh steam control valve and the fresh steam bypass line having the regulating valve are configured such that the steam turbine both in the nominal operating state with 100% fresh steam mass flow, and in the special operating state with more than 100% fresh steam mass flow, can be operated with a completely open fresh steam control valve, wherein excess fresh steam mass flow compared to the nominal operating state can be conducted to the inlet of the fresh steam control valve via the fresh steam bypass line past the steam turbine, or with 100% fresh steam mass flow a reduction of the static pressure of the fresh steam can be achieved by conducting a predetermined percentage of the fresh steam mass flow past it via the fresh steam bypass line. A power plant having the steam turbine system comprises an intermediate superheater for superheating the fresh steam, wherein tap steam can be fed to said superheater.

IPC 8 full level
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CPC (source: EP US)
F01D 17/145 (2013.01 - EP US); **F01K 3/181** (2013.01 - EP US); **F01K 7/165** (2013.01 - EP US)

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