Title (en)

STEAM CIRCUIT AND A METHOD FOR OPERATING A STEAM CIRCUIT

Title (de)

WASSERDAMPFKREISLAUF SOWIE EIN VERFAHREN ZUM BETREIBEN EINES WASSERDAMPFKREISLAUFES

Title (fr)

CIRCUIT DE VAPEUR D'EAU ET PROCÉDÉ DE FONCTIONNEMENT D'UN CIRCUIT DE VAPEUR D'EAU

Publication

EP 3111059 B1 20200325 (DE)

Application

EP 15716068 A 20150416

Priority

- EP 14167157 A 20140506
- EP 2015058308 W 20150416

Abstract (en)

[origin: WO2015169562A1] The invention relates to a steam cycle (10) for a power station, and to a method for operating, in particular for starting, a steam cycle (10). The steam cycle (10) comprises a high-pressure turbine (12), a condenser (40) and a steam generator (30). The steam generator (30) is connected to the high-pressure turbine (12) via a first line (17). Live steam quick-closing valves (14) and live steam regulating valves (15) for supplying the high-pressure turbine (12) are arranged in the direction of the steam flow between the steam generator (30) and the high-pressure turbine (12). A starting line (23, 25) is arranged downstream of the high-pressure turbine (12) in the direction of the steam flow, said starting line connecting a waste steam region (13) downstream of the high-pressure turbine (12) with the condenser (40). At least one regulator (26, 29) is provided which regulates a closing of a starting valve (27) for sealing the starting line (25), and an opening of the live steam valve (15), depending on the rotational speed, a temperature and load state of the high-pressure turbine (12).

IPC 8 full level

F01K 7/22 (2006.01); **F01K 9/04** (2006.01); **F01K 13/02** (2006.01)

CPC (source: CN EP KR RU US)

F01K 7/22 (2013.01 - CN EP KR RU US); **F01K 9/04** (2013.01 - CN EP KR US); **F01K 13/02** (2013.01 - CN EP KR US)

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

DOCDB simple family (publication)

EP 2942493 A1 20151111; BR 112016025215 A2 20170815; CN 106255807 A 20161221; CN 106255807 B 20180223; EP 3111059 A1 20170104; EP 3111059 B1 20200325; JP 2017521591 A 20170803; JP 6685237 B2 20200422; KR 20160148013 A 20161223; RU 2653617 C1 20180511; US 10167742 B2 20190101; US 2017044935 A1 20170216; WO 2015169562 A1 20151112

DOCDB simple family (application)

EP 14167157 A 20140506; BR 112016025215 A 20150416; CN 201580023915 A 20150416; EP 15716068 A 20150416; EP 2015058308 W 20150416; JP 2016566684 A 20150416; KR 20167033771 A 20150416; RU 2016147413 A 20150416; US 201515306545 A 20150416