

Title (en)

MOISTURE SEPARATION FACILITY, POWER PLANT AND METHOD FOR OPERATING STEAM TURBINE

Title (de)

FEUCHTIGKEITSABSCHIEDUNGSANLAGE, KRAFTWERK UND VERFAHREN ZUM BETRIEB EINER DAMPFTURBINE

Title (fr)

INSTALLATION DE SÉPARATION D'HUMIDITÉ, CENTRALE ÉLECTRIQUE ET PROCÉDÉ DE FONCTIONNEMENT D'UNE TURBINE À VAPEUR

Publication

EP 3696381 A4 20210127 (EN)

Application

EP 18892527 A 20181204

Priority

- JP 2017245154 A 20171221
- JP 2018044629 W 20181204

Abstract (en)

[origin: EP3696381A1] This moisture separation facility is provided with: a moisture separation heater (3) that separates the moisture content from a steam; a steam extraction pipe (5) that extracts some of the steam from the moisture separation heater (3); a heat exchanger (6) that performs a heat exchange between a heating medium and a steam which is extracted from the moisture separation heater (3) through the steam extraction pipe (5), thereby heating the steam; a heater (7) that heats the heating medium; and a steam introduction pipe (8) that introduces the steam, which has been heated by the heat exchanger (6), into a low pressure steam turbine (4) as a working fluid. This moisture separation facility is operated by the low pressure steam turbine (4), the steam from which the moisture content is separated by means of the moisture separation heater (3), and the steam which is heated by means of the heat exchanger (6).

IPC 8 full level

F01K 7/22 (2006.01); **F01K 7/44** (2006.01); **F01K 25/10** (2006.01); **F03G 4/00** (2006.01); **F22B 37/26** (2006.01); **G21D 1/02** (2006.01)

CPC (source: EP)

F01K 7/223 (2013.01); **F01K 7/44** (2013.01); **F22B 37/266** (2013.01)

Citation (search report)

- [XAI] US 4386583 A 19830607 - RABAS THOMAS J
- [XAI] FR 2316707 A1 19770128 - STAL LAVAL TURBIN AB [SE]
- [XAI] US 2011056201 A1 20110310 - KLUGE STEVEN CRAIG [US], et al
- [XAI] US 2003043952 A1 20030306 - ITOU SHUUICHI [JP], et al
- [A] EP 2947385 A1 20151125 - MITSUBISHI HITACHI POWER SYS [JP]
- See references of WO 2019124066A1

Cited by

CN113446649A

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 3696381 A1 20200819; EP 3696381 A4 20210127; CN 111373123 A 20200703; CN 111373123 B 20220715; JP 2019112966 A 20190711;
JP 6963492 B2 20211110; WO 2019124066 A1 20190627

DOCDB simple family (application)

EP 18892527 A 20181204; CN 201880075357 A 20181204; JP 2017245154 A 20171221; JP 2018044629 W 20181204