

Title (en)

Method for starting a steam turbine plant

Title (de)

Verfahren zum Starten einer Dampfturbinenanlage

Title (fr)

Procédé de démarrage d'une installation de turbines à vapeur

Publication

EP 1744020 A1 20070117 (DE)

Application

EP 05015350 A 20050714

Priority

EP 05015350 A 20050714

Abstract (en)

The method involves measuring temperature of steam and a delivery unit, where starting temperature of the steam is lower than the temperature of the unit and is increased with a starting transient. The temperature and the transient are selected in such a manner that the temperature change lies per time unit of the unit. The temperature of the unit is lowered initially until a minimum is reached and is increased afterwards.

IPC 8 full level

F01K 13/02 (2006.01); **F01D 19/02** (2006.01); **F01K 7/16** (2006.01)

CPC (source: EP US)

F01D 19/02 (2013.01 - EP US); **F01K 7/165** (2013.01 - EP US); **F01K 13/02** (2013.01 - EP US); **F05D 2220/31** (2013.01 - EP US); **F05D 2260/85** (2013.01 - EP US)

Citation (search report)

- [A] US 3532079 A 19701006 - CHAMBERT L A
- [A] US 4208882 A 19800624 - CARBERG WILLIAM G [US], et al
- [A] US 4226086 A 19801007 - BINSTOCK MORTON H, et al
- [A] US 4589255 A 19860520 - MARTENS ALAN [US], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 128 (M - 220) 3 June 1983 (1983-06-03)
- [A] DOLEZAL R: "ANFAHREN EINES AUF 550 DEG C ERHITZTEN DURCHLAUF-ABHITZEKESSELS OHNE ABGASBYPASS IM HEIZKRAFTWERK DER UNIVERSITAT STUTTGART", VGB KRAFTWERKSTECHNIK, VGB KRAFTWERKSTECHNIK GMBH. ESSEN, DE, vol. 69, no. 12, 1 December 1989 (1989-12-01), pages 1163 - 1166, XP000085719, ISSN: 0372-5715

Cited by

ITMI20110498A1; DE102014211976A1; CN106460566A; US10385733B2; WO2012131575A1; US9523289B2; WO2015197238A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1744020 A1 20070117; BR PI0613011 A2 20101214; CA 2615001 A1 20070118; CA 2615001 C 20120508; CN 101305163 A 20081112; CN 101305163 B 20121114; EP 1957759 A2 20080820; EP 1957759 B1 20160914; ES 2607357 T3 20170330; JP 2009501292 A 20090115; JP 4762310 B2 20110831; PL 1957759 T3 20170428; RU 2370653 C1 20091020; US 2009126365 A1 20090521; US 7805941 B2 20101005; WO 2007006617 A2 20070118; WO 2007006617 A3 20080626

DOCDB simple family (application)

EP 05015350 A 20050714; BR PI0613011 A 20060613; CA 2615001 A 20060613; CN 200680025622 A 20060613; EP 06763662 A 20060613; EP 2006063135 W 20060613; ES 06763662 T 20060613; JP 2008520822 A 20060613; PL 06763662 T 20060613; RU 2008105549 A 20060613; US 98860506 A 20060613