

Title (en)

CONTROL DEVICE AND METHOD FOR A QUICK-ACTING GATE VALVE OF A STEAM TURBINE

Title (de)

STEUEREINRICHTUNG UND -VERFAHREN FÜR EIN SCHNELLSCHLUSVENTIL EINER DAMPFTURBINE

Title (fr)

DISPOSITIF ET PROCEDE DE COMMANDE POUR UNE SOUPAPE A FERMETURE RAPIDE D'UNE TURBINE A VAPEUR

Publication

**EP 2276935 B1 20120104 (DE)**

Application

**EP 09749621 A 20090519**

Priority

- EP 2009003585 W 20090519
- DE 102008024253 A 20080520

Abstract (en)

[origin: US2011072821A1] A control device for a quick-closing valve of a steam turbine including a relief valve for reducing a hydraulic pressure opening the quick-closing valve, and a relief valve control valve arrangement having at least three valves which are hydraulically interconnected with the relief valve in such a way that the relief valve does not close the quick-closing valve unless at least two valves of the relief valve control valve arrangement are switched to a quick-closing position. The system includes a test control valve arrangement for selectively reducing and increasing the hydraulic pressure opening the quick-closing valve when the relief valve is closed.

IPC 8 full level

**F15B 20/00** (2006.01)

CPC (source: EP US)

**F15B 19/00** (2013.01 - EP US); **F15B 20/00** (2013.01 - EP US); **F15B 2211/30565** (2013.01 - EP US); **F15B 2211/31558** (2013.01 - EP US); **Y10T 137/7722** (2015.04 - EP US)

Cited by

DE102012022871A1; US10066645B2

Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

**US 2011072821 A1 20110331**; AT E540226 T1 20120115; BR PI0912859 A2 20190306; BR PI0912859 B1 20200609; CN 102037249 A 20110427; CN 102037249 B 20150520; DE 102008024253 A1 20091126; EP 2276935 A1 20110126; EP 2276935 B1 20120104; JP 2011521158 A 20110721; JP 5160685 B2 20130313; PL 2276935 T3 20120831; WO 2009141131 A1 20091126

DOCDB simple family (application)

**US 99394409 A 20090519**; AT 09749621 T 20090519; BR PI0912859 A 20090519; CN 200980118871 A 20090519; DE 102008024253 A 20080520; EP 09749621 A 20090519; EP 2009003585 W 20090519; JP 2011509889 A 20090519; PL 09749621 T 20090519