

Title (en)  
ACTUATING DRIVE FOR A CONTROL VALVE, IN PARTICULAR A STEAM TURBINE CONTROL VALVE, AND METHOD FOR OPERATING SAME

Title (de)  
STELLANTRIEB FÜR EIN REGELVENTIL, INSBESONDERE DAMPFTURBINENREGELVENTIL UND VERFAHREN ZUM BETREIBEN DESSELBEN

Title (fr)  
MÉCANISME DE COMMANDE POUR UNE SOUPAPE DE RÉGLAGE, EN PARTICULIER UNE SOUPAPE DE RÉGLAGE D'UNE TURBINE À VAPEUR, ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication  
**EP 3234373 A1 20171025 (DE)**

Application  
**EP 15785149 A 20151028**

Priority  
• DE 102014226666 A 20141219  
• EP 2015074961 W 20151028

Abstract (en)  
[origin: WO2016096221A1] The invention relates to an actuating drive for a control valve, in particular a steam turbine control valve, comprising a working cylinder, which has a piston and a piston rod, which is connected to the piston and which forms an actuator for the control valve, wherein the piston bounds a first pressure chamber of the working cylinder and the first pressure chamber has a first pressure connection for introducing a pressurized working medium in order to move the piston together with the piston rod against the force of a spring associated with the working cylinder by the application of pressure; comprising an external working-medium circuit, to which the working cylinder is connected in order to selectively introduce the working medium into or lead the working medium out of the first pressure chamber; wherein the external working-medium circuit has a working-medium pump driven by a motor; and the working-medium pump is connected to the first pressure connection of the first pressure chamber by means of a pressure line connected to a pressure side of the working-medium pump, wherein a check valve or stop valve that opens in the direction of the first pressure connection is provided in the pressure line. The actuating drive according to the invention is characterized in that a short-circuit line branches off from the pressure line before the check valve or stop valve in the flow direction of the working medium, which short-circuit line connects the pressure line to a suction side of the working-medium pump, the working cylinder thus being bypassed, and a short-circuit valve is arranged in the short-circuit line, by means of which short-circuit valve the short-circuit line can be selectively blocked so as to prevent flow of the working medium to the suction side.

IPC 8 full level  
**F15B 11/042** (2006.01); **F01D 17/26** (2006.01); **F15B 20/00** (2006.01)

CPC (source: CN EP US)  
**F01D 17/18** (2013.01 - CN EP US); **F15B 11/0423** (2013.01 - CN EP US); **F15B 13/021** (2013.01 - US); **F15B 13/027** (2013.01 - US); **F15B 13/0444** (2013.01 - US); **F15B 20/007** (2013.01 - CN EP US); **F16K 31/12** (2013.01 - US); **F15B 2211/20515** (2013.01 - CN EP US); **F15B 2211/20538** (2013.01 - CN EP US); **F15B 2211/30505** (2013.01 - CN EP US); **F15B 2211/45** (2013.01 - CN EP US); **F15B 2211/851** (2013.01 - CN EP US)

Citation (search report)  
See references of WO 2016096221A1

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)  
**DE 102014226666 B3 20151224**; CN 107002716 A 20170801; CN 107002716 B 20190402; EP 3234373 A1 20171025; US 10400799 B2 20190903; US 2018274567 A1 20180927; WO 2016096221 A1 20160623

DOCDB simple family (application)  
**DE 102014226666 A 20141219**; CN 201580067874 A 20151028; EP 15785149 A 20151028; EP 2015074961 W 20151028; US 201515537729 A 20151028