

Title (en)

CONTROL EQUIPMENT FOR OPERATING VALVE HYDRAULIC SYSTEMS

Title (de)

BEDIENELEMENT ZUM STEUERN VON HYDRAULISCHEN VENTILSYSTEMEN

Title (fr)

ELEMENT DE CONTRÔLE POUR OPÉRER DES SYSTÈMES DE VALVES HYDRAULIQUES

Publication

**EP 3992749 A1 20220504 (EN)**

Application

**EP 21201698 A 20211008**

Priority

- IT 202000023773 A 20201008
- IT 202000023860 A 20201009

Abstract (en)

A control apparatus for actuating hydraulic valve systems comprises an actuation section including an oscillating control element and a plurality of control rods provided with a pusher capable of interacting with the control element so as to translate the control rods in a longitudinal direction, a sensor section including a plurality of sensor elements for detecting a movement in a longitudinal direction of said control rods, and an auxiliary section capable of generating a force opposing the motion of the control rods.

IPC 8 full level

**G05G 5/03** (2008.04); **E02F 9/20** (2006.01); **G05G 9/047** (2006.01)

CPC (source: EP)

**G05G 5/03** (2013.01); **E02F 9/2004** (2013.01); **G05G 9/047** (2013.01); **G05G 2009/04718** (2013.01); **G05G 2009/04766** (2013.01)

Citation (applicant)

- WO 2018159330 A1 20180907 - KOMATSU MFG CO LTD [JP]
- US 2006169498 A1 20060803 - BLANCO MARCEL [FR]
- US 2013276925 A1 20131024 - MERLETTI DIDIER [FR], et al
- WO 2008130870 A1 20081030 - HUSCO INT INC [US], et al
- JP 2000276244 A 20001006 - HITACHI CONSTRUCTION MACHINERY
- US 6002184 A 19991214 - DELSON NATHAN J [US], et al
- US 5576704 A 19961119 - BAKER THOMAS M [US], et al
- WO 2015005695 A1 20150115 - AN SANG JEONG [KR]
- EP 3096197 A2 20161123 - GRAMMER AG [DE]

Citation (search report)

- [XAI] US 6002184 A 19991214 - DELSON NATHAN J [US], et al
- [XAI] US 5576704 A 19961119 - BAKER THOMAS M [US], et al
- [YA] WO 2015056595 A1 20150423 - KOMATSU MFG CO LTD [JP]
- [YA] EP 3096197 A2 20161123 - GRAMMER AG [DE]

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)

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