

Title (en)  
ACTUATOR CONTROL DEVICE

Title (de)  
STEUERUNGSVORRICHTUNG FÜR AKTUATOR

Title (fr)  
DISPOSITIF DE COMMANDE D'ACTIONNEUR

Publication  
**EP 3599383 A1 20200129 (EN)**

Application  
**EP 19186852 A 20190717**

Priority  
IT 201800007591 A 20180727

Abstract (en)

A control device of a linear hydraulic actuator of an earth-moving machine is described, in which the device comprises a control valve provided with a first position in which it allows a supply flow of the operating fluid towards the hydraulic actuator and a second position in which it allows a discharge flow towards a distributor, an anti-vibration line which connects a pilot line of the control valve with a hydraulic line between the control valve and the distributor, and a pressure valve located in the anti-vibration line and configured to open at a certain pressure value when the movable member of the hydraulic actuator reaches the end of its stroke and if the operating fluid circuit is intact, in order to avoid an undesired generation of vibrations.

IPC 8 full level  
**F15B 11/00** (2006.01); **F15B 21/00** (2006.01)

CPC (source: CN EP)  
**F15B 11/003** (2013.01 - EP); **F15B 13/04** (2013.01 - CN); **F15B 21/008** (2013.01 - CN EP); **F15B 2211/30515** (2013.01 - EP);  
**F15B 2211/30525** (2013.01 - EP); **F15B 2211/3111** (2013.01 - EP); **F15B 2211/31576** (2013.01 - EP); **F15B 2211/329** (2013.01 - EP);  
**F15B 2211/355** (2013.01 - EP); **F15B 2211/50536** (2013.01 - EP); **F15B 2211/5756** (2013.01 - EP); **F15B 2211/8613** (2013.01 - EP)

Citation (applicant)

- EP 3228580 A1 20171011 - ATLANTIC FLUID TECH S R L [IT]
- GB 2514112 A 20141119 - CATERPILLAR INC [US]
- JP 4890147 B2 20120307
- JP 2014206245 A 20141030 - KOBELCO CONSTR MACHINERY LTD
- EP 3312436 A1 20180425 - ATLANTIC FLUID TECH S R L [IT]
- US 4936032 A 19900626 - MARCON LOUIS [FR], et al

Citation (search report)

- [YA] US 4936032 A 19900626 - MARCON LOUIS [FR], et al
- [YA] EP 3312436 A1 20180425 - ATLANTIC FLUID TECH S R L [IT]
- [A] DE 102015221713 A1 20170511 - BOSCH GMBH ROBERT [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)  
**EP 3599383 A1 20200129; EP 3599383 B1 20230531; CN 110778560 A 20200211; CN 110778560 B 20230609; IT 201800007591 A1 20200127**

DOCDB simple family (application)  
**EP 19186852 A 20190717; CN 201910679376 A 20190726; IT 201800007591 A 20180727**