

Title (en)

Anti cavitation device for a hydraulic cylinder

Title (de)

Kavitationsschutzvorrichtung für einen Hydraulikzylinder

Title (fr)

Dispositif d'anti-cavitation pour vérin hydraulique

Publication

**EP 2786959 A1 20141008 (EN)**

Application

**EP 13425049 A 20130405**

Priority

EP 13425049 A 20130405

Abstract (en)

Anti-cavitation device for a hydraulic cylinder, comprising: a first conduit (2) predisposed to connect a first chamber (C1) of a cylinder (C) with a distributor (D); a second conduit (3), predisposed to connect a second chamber (C2) of the cylinder (C) with the distributor (D); a control valve (4), arranged along the first conduit (2), which is predisposed to allow the flow of fluid from the distributor (D) towards the first chamber (C1) and to allow the flow of fluid from the first chamber (C1) towards the distributor (D) only if it is supplied with a pilot pressure over a minimum value; a third conduit (5), which connects the second conduit (3) with a tract of the first conduit (2) between the control valve (4) and the distributor (D); a shut-off valve (6), arranged along the third conduit (5), which is mobile, following a command, between an open configuration, wherein it allows the flow along the third conduit (5), and a closed configuration, wherein it prevents the flow along the third conduit (5); the activation valve (6) is configured to receive an opening command only if the control valve (4) is supplied with the pilot pressure.

IPC 8 full level

**B66F 9/22** (2006.01); **E02F 9/22** (2006.01); **F15B 11/024** (2006.01); **F15B 21/047** (2019.01)

CPC (source: EP)

**B66F 9/22** (2013.01); **E02F 9/226** (2013.01); **F15B 11/024** (2013.01); **F15B 21/047** (2013.01); **F15B 2211/30505** (2013.01); **F15B 2211/30515** (2013.01); **F15B 2211/3058** (2013.01); **F15B 2211/327** (2013.01); **F15B 2211/329** (2013.01)

Citation (search report)

- [X] EP 1574474 A2 20050914 - DEERE & CO [US]
- [X] EP 2196682 A1 20100616 - BOSCH REXROTH OIL CONTROL S P [IT]

Cited by

US11225981B2; IT202200017229A1; IT202200017232A1; EP4325068A1; IT202200017223A1

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 2786959 A1 20141008; EP 2786959 B1 20170510**

DOCDB simple family (application)

**EP 13425049 A 20130405**