

Title (en)  
TUBE RUPTURE PROTECTION DEVICE

Title (de)  
SCHLAUCHRISS-SCHUTZVORRICHTUNG

Title (fr)  
DISPOSITIF DE PROTECTION DE RUPTURE DE TUBE

Publication  
**EP 3557083 A1 20191023 (EN)**

Application  
**EP 19168769 A 20190411**

Priority  
IT 201800004555 A 20180416

Abstract (en)  
A tube rupture protection device is disclosed that ensures safety conditions in the event of rupture of a flexible tube connected to a hydraulic actuator of an arm of an actuator, in which the protection device comprises a control valve that in the event of a tube rupture, closes, partially or totally, automatically; the control valve, during normal operation, it adopts a widely open position in which it generates a relatively small load drop, with a consequent energy saving.

IPC 8 full level  
**F15B 11/00** (2006.01); **E02F 9/22** (2006.01); **F15B 20/00** (2006.01)

CPC (source: EP)  
**E02F 9/226** (2013.01); **F15B 11/003** (2013.01); **F15B 20/005** (2013.01); **F15B 2211/30515** (2013.01); **F15B 2211/355** (2013.01); **F15B 2211/6355** (2013.01); **F15B 2211/8636** (2013.01); **F15B 2211/865** (2013.01)

Citation (applicant)  
• GB 2514112 A 20141119 - CATERPILLAR INC [US]  
• JP 4890147 B2 20120307  
• JP 2014206245 A 20141030 - KOBELCO CONSTR MACHINERY LTD

Citation (search report)  
• [XD] GB 2514112 A 20141119 - CATERPILLAR INC [US]  
• [A] DE 102015221713 A1 20170511 - BOSCH GMBH ROBERT [DE]  
• [A] EP 1387089 A2 20040204 - KOBELCO CONSTR MACHINERY LTD [JP]  
• [A] WO 2016011193 A1 20160121 - EATON CORP [US]

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 3557083 A1 20191023**; **EP 3557083 B1 20220727**; IT 201800004555 A1 20191016

DOCDB simple family (application)  
**EP 19168769 A 20190411**; IT 201800004555 A 20180416