

Title (en)  
DUAL-ACTING EXPANSION CYLINDER WITH ADAPTIVE SUPPORT

Title (de)  
DOPPELTWIRKENDER EXPANSIONSZYLINDER MIT ADAPTIVEM TRÄGER

Title (fr)  
CYLINDRE DETENDEUR A DOUBLE EFFET A SUPPORT ADAPTATIF

Publication  
**EP 3350433 A1 20180725 (FR)**

Application  
**EP 16775804 A 20160907**

Priority

- FR 1558585 A 20150914
- FR 2016052232 W 20160907

Abstract (en)  
[origin: CA2998581A1] The dual-acting expansion cylinder (1) comprises a cylinder barrel (71) which collaborates with a dual-acting expansion piston (2) connected to transmission means (3) housed in a transmission casing (8), while a hollowed pillar (13), the ends of which are articulated, has passing through it a rod tunnel and bears against the said casing (8) so as to support the said barrel (71), a tension bolt (17), likewise articulated, passing through the said tunnel to clamp the cylinder barrel (71) to the hollowed-out pillar (13) whereas lower cylinder centring means (20) and upper cylinder centring means (21) secured to the transmission casing (8) notably via a centring portal (22) leave the cylinder barrel (71) free to move parallel to its longitudinal axis but not in the plane perpendicular to the said axis.

IPC 8 full level  
**F02G 1/053** (2006.01)

CPC (source: EP KR)  
**F02G 1/053** (2013.01 - EP KR); **F02G 2270/55** (2013.01 - EP KR)

Cited by  
WO2023152451A1; FR3132737A1; WO2023152701A1; FR3132747A1; US12000357B2

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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

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**FR 3041040 A1 20170317; FR 3041040 B1 20171103**; AU 2016321973 A1 20180419; AU 2016321973 B2 20200702;  
CA 2998581 A1 20170323; CA 2998581 C 20231212; CN 108138694 A 20180608; CN 108138694 B 20201106; EP 3350433 A1 20180725;  
EP 3350433 B1 20190807; ES 2751760 T3 20200401; JP 2018530697 A 20181018; JP 6876035 B2 20210526; KR 20180052657 A 20180518;  
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