

Title (en)

PRESSURE CONVERTER WITH PISTONS COMPRISING END-OF-STROKE PRESSURE REDUCER

Title (de)

DRUCKÜBERSETZER MIT KOLBEN UMFASSEND EINEN DRUCKMINDERER IN DER ENDLAGE

Title (fr)

CONVERTISSEUR DE PRESSION À PISTON COMPRENANT UN DÉTENDEUR DE FIN DE COURSE

Publication

EP 3143288 B1 20181107 (FR)

Application

EP 15732299 A 20150507

Priority

- FR 1454223 A 20140512
- FR 1455710 A 20140620
- FR 2015051209 W 20150507

Abstract (en)

[origin: US2015322976A1] The travel end expansion valve (1) for a piston type pressure converter (2) whose master cylinder (3) and slave cylinder (4) define a master chamber (9) and a slave chamber (10), respectively, includes an expansion master cylinder (12) which communicates with the slave chamber (10) and in which there can move an expansion main master piston (14) which is mechanically connected by a lever type transmission (11) with progressive effect to an expansion slave pump piston (15) which can move in an expansion slave cylinder (13), the transmission (11) being provided in such a manner that, when the expansion main master piston (14) is at the top dead center, the expansion slave pump piston (15) is at the bottom dead center, and vice versa, while an expansion release actuator (30) can cause the transmission (11) to move.

IPC 8 full level

F04B 9/04 (2006.01); **F04B 9/107** (2006.01); **F15B 3/00** (2006.01)

CPC (source: CN EP KR US)

F04B 9/04 (2013.01 - CN EP KR US); **F04B 9/107** (2013.01 - CN EP KR US); **F04B 9/1076** (2013.01 - EP US);
F15B 3/00 (2013.01 - CN EP KR US); **F15B 11/16** (2013.01 - KR US); **F15B 13/06** (2013.01 - KR US); **F15B 15/17** (2013.01 - KR 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

DOCDB simple family (publication)

US 2015322976 A1 20151112; US 9856891 B2 20180102; AU 2015261366 A1 20161215; AU 2015261366 B2 20180823;
CA 2946466 A1 20151119; CA 2946466 C 20220906; CN 106662082 A 20170510; CN 106662082 B 20181228; EP 3143288 A1 20170322;
EP 3143288 B1 20181107; ES 2709397 T3 20190416; FR 3020840 A1 20151113; FR 3020840 B1 20170303; FR 3020841 A1 20151113;
FR 3020841 B1 20170707; JP 2017520725 A 20170727; JP 6559704 B2 20190814; KR 102277604 B1 20210714; KR 20170002430 A 20170106;
WO 2015173495 A1 20151119

DOCDB simple family (application)

US 201514709036 A 20150511; AU 2015261366 A 20150507; CA 2946466 A 20150507; CN 201580024795 A 20150507;
EP 15732299 A 20150507; ES 15732299 T 20150507; FR 1454223 A 20140512; FR 1455710 A 20140620; FR 2015051209 W 20150507;
JP 2016563464 A 20150507; KR 20167031252 A 20150507