

Title (en)

Load-independent speed control of hydraulic actuators for construction machines

Title (de)

Lastdruckunabhängige Steuerung der Geschwindigkeit von hydraulischen Stellelementen an Baumaschinen

Title (fr)

Commande de vitesse, ne dépendant pas de la pression de charge pour éléments hydrauliques de réglage sur des machines de construction

Publication

EP 0615024 B1 20010411 (DE)

Application

EP 94101011 A 19940125

Priority

DE 4307872 A 19930312

Abstract (en)

[origin: EP0615024A2] Load-independent speed control of hydraulic actuators in the case of leading loads, in particular for construction machines, is proposed, comprising at least one pump, at least one control spool, and at least one pressure balance. The pressure balance is inserted either in the connecting line of the space, to be emptied in a controlled manner, of the actuator, designed as hydraulic cylinder, to the control spool or else in the line between the outlet of the control spool and the tank. The return area of the associated control piston is designed as a differential-pressure orifice. The pressure indication before the passage of the oil flow through the differential-pressure orifice to the pressure balance can be brought about via a line to the side of the pressure balance remote from the spring chamber. <IMAGE>

IPC 1-7

E02F 9/22

IPC 8 full level

E02F 9/22 (2006.01); **F15B 11/044** (2006.01)

CPC (source: EP)

E02F 9/2203 (2013.01); **E02F 9/2225** (2013.01); **E02F 9/2232** (2013.01); **E02F 9/2296** (2013.01); **F15B 11/0445** (2013.01); **F15B 2211/20553** (2013.01); **F15B 2211/30535** (2013.01); **F15B 2211/3055** (2013.01); **F15B 2211/3056** (2013.01); **F15B 2211/3144** (2013.01); **F15B 2211/351** (2013.01); **F15B 2211/353** (2013.01); **F15B 2211/6054** (2013.01); **F15B 2211/75** (2013.01)

Cited by

CN104314896A; EP0823559A3

Designated contracting state (EPC)

AT BE CH DE ES FR IT LI NL

DOCDB simple family (publication)

EP 0615024 A2 19940914; **EP 0615024 A3 19960925**; **EP 0615024 B1 20010411**; AT E200538 T1 20010415; DE 4307872 A1 19940922; DE 4307872 C2 20010517; DE 59409720 D1 20010517; ES 2155837 T3 20010601

DOCDB simple family (application)

EP 94101011 A 19940125; AT 94101011 T 19940125; DE 4307872 A 19930312; DE 59409720 T 19940125; ES 94101011 T 19940125