

Title (en)

LOAD-SENSITIVE HYDRAULIC CONTROL SYSTEM FOR A MOBILE WORKING MACHINE

Title (de)

LASTFÜHLENDE HYDRAULISCHE STEUERANORDNUNG FÜR EINE MOBILE ARBEITSMASCHINE

Title (fr)

DISPOSITIF DE COMMANDE HYDRAULIQUE SENSIBLE A UNE CHARGE POUR UNE MACHINE DE TRAVAIL

Publication

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Application

EP 00912605 A 20000315

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Abstract (en)

[origin: WO0058570A1] The invention relates to a control system, in particular for a wheel loader or a fork-lift truck, comprising at least one hydraulic cylinder (14) which helps to operate a working tool, a main line which leads from a hydraulic fluid source (9) to a pressure chamber (28) of the hydraulic cylinder and a valve assembly which is located in the main line. Said valve assembly has at least one proportioning diaphragm (18) which can be adjusted in order to control the direction and speed of movement of the hydraulic cylinder. The valve assembly also has an individual pressure regulator (36) which is allocated thereto and a directional valve (15), with which an intermediate section of the main line can be shut off in relation to a consumer section which is connected to the pressure chamber of the hydraulic cylinder and in relation to a supply section of the main line which is connected to the hydraulic fluid source. The invention aims to improve a load-sensitive hydraulic control system of this type by dampening the pitch oscillations of the working machine. To achieve this, the fill line (41) for the hydraulic accumulator (40) branches off from the intermediate section of the main line. The hydraulic accumulator is thus not charged when another hydraulic consumer is actuated. This also prevents hydraulic fluid from being displaced during normal operation.

IPC 1-7

E02F 9/22; F15B 11/16; F15B 1/02

IPC 8 full level

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