

Title (en)

HYDRAULIC CONTROL ARRANGEMENT WITH REGENERATION AND LOWERING BRAKE VALVE

Title (de)

HYDRAULISCHE STEUERANORDNUNG MIT REGENERATION UND SENKBREMSVENTIL

Title (fr)

SYSTEME DE COMMANDE HYDRAULIQUE A REGENERATION ET SOUPAPE DE FREIN D'ABAISSMENT

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Application

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Abstract (en)

[origin: WO2007090522A1] A hydraulic control arrangement for activating a consumer, in particular a hydraulic cylinder, is disclosed, comprising a directional control valve (34), the valve spool (38) of which is adjustable for controlling the pressure medium connection between a pressure medium source, a tank and two pressure spaces of the consumer, and comprising a lowering brake valve (20) for controlling the discharge of the volumetric flow of pressure medium from a pressure space becoming smaller, the control piston (22) of which lowering brake valve (20) is acted upon in the closing direction by the force of a spring (24) and in the opening direction by the pressure in the pressure space becoming larger, wherein, for the regeneration, pressure medium can be branched off from the discharging volumetric flow of pressure medium upstream of the lowering brake valve via a non-return valve (28), opening in the direction of the pressure space becoming larger, in a regeneration line and can be accumulated to form the volumetric flow of pressure medium in the feed. According to the invention, the non-return valve is integrated in the valve spool, wherein the pressure acting on the lowering brake valve in the opening direction is indicated through the non-return valve.

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