

Title (en)

HYDRAULIC DRIVE SYSTEM WITH TWO PUMPS AND ENERGY RECOVERY

Title (de)

HYDRAULISCHES ANTRIEBSSYSTEM MIT ZWEI PUMPEN UND ENERGIERÜCKGEWINNUNG

Title (fr)

SYSTÈME D'ENTRAÎNEMENT HYDRAULIQUE À DEUX POMPES ET À RÉCUPÉRATION D'ÉNERGIE

Publication

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Application

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Priority

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Abstract (en)

[origin: CN112032126A] The invention relates to a hydraulic drive system (10, 10) having at least one first actuator (20), a tank (13), a first check valve (43) and first and second pumps (40, 50), wherein the first pump (40) has a constant displacement volume and the second pump (50) has an adjustable displacement volume; a first fluid flow path extends from the tank (13), via the first pump (40), further via a first control point (11), further via the first check valve (43), to a second control point (12), and at least one first actuator (20) is fluidically connected to the second control point (12); a pressure fluid can be conducted from the first control point (11) to the tank (13) via an adjustable first diaphragm (41), and the first diaphragm (41) is subjected to a pressure on the first control point (11) in the opening direction. According to the invention, the first diaphragm (41) is acted upon by a settable predefined control force (44) in the closing direction, which control force is independent of a separate load pressure (23) acting in the at least one first actuator (20).

IPC 8 full level

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DE 102015216737 A1 20170302 - BOSCH GMBH ROBERT [DE]

Cited by

WO2024002958A1; WO2023036683A1

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