

Title (en)

BALANCE CYLINDER HYDRAULIC SYSTEM

Title (de)

HYDRAULISCHES AUSGLEICHSZYLINDERSYSTEM

Title (fr)

SYSTÈME HYDRAULIQUE DE CYLINDRE D'ÉQUILIBRAGE

Publication

EP 4265918 A1 20231025 (EN)

Application

EP 21905211 A 20210929

Priority

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Abstract (en)

The present disclosure provides a balance cylinder hydraulic system, comprising: a valve assembly; and a balance cylinder comprising a housing, a piston member, and a first cavity, a second cavity and a third cavity which are obtained by the piston member movably sealing a hollow region enclosed by the housing, wherein the area of the piston member acting on the first cavity is equal to the area of the piston member acting on the second cavity, the pressure of the first cavity is equal to the pressure of the second cavity and higher than the pressure of the third cavity, and a compensation oil passage controlled by the valve assembly is provided between the first cavity and the third cavity; a first accumulator, between the first accumulator and the first cavity, a target oil passage and a first oil passage which are controlled by the valve assembly being provided; and a second accumulator in communication with the second cavity, a second oil passage controlled by the valve assembly being provided between the second accumulator and the first cavity. In the embodiments of the present disclosure, after the internal leakage in the balance cylinder occurs, the system can automatically compensate for the internal leakage, without stopping the operation of the balance cylinder.

IPC 8 full level

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CPC (source: CN EP)

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Citation (search report)

See references of WO 2022127281A1

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