

Title (en)
A CONTROL SYSTEM AND A METHOD FOR CONTROLLING AN ACTUATOR AND FOR OPTIMIZING THE CONTROL BY MEANS OF SETS OF VALVES COUPLED IN PARALLEL

Title (de)
STEUERSYSTEM UND -VERFAHREN ZUR STEUERUNG EINES STELLGLIEDS UND ZUR OPTIMIERUNG DER STEUERUNG DURCH EINEN SATZ VON PARALLELGESCHALTETEN VENTILEN

Title (fr)
SYSTEME DE COMMANDE ET PROCEDE PERMETTANT DE COMMANDER UN ACTIONNEUR ET D'OPTIMISER LA COMMANDE A L'AIDE D'ENSEMBLES DE VALVES MONTEES EN PARALLELE

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Application
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Abstract (en)
[origin: WO02086327A1] A control system and a method for controlling a pressure medium circuit which is arranged for the rate control and/or the position control of an actuator driven by pressurized medium. The pressure medium circuit comprises a first connection (1) between an input port (P) and a first working port (A), a second connection (2) between an output port (T) and a second working port (B), and valve means (102) for guiding the volume flow of said connections (1, 2), which valve means comprise at least a first set (103) and at least a second set (104) of controllable valves (V1-V4), coupled in parallel, which can be opened and closed, wherein the volume flow of the set (103, 104) is determined as the sum of the capacities of the valves controlled to be opened at a time, and wherein the first set (103) is coupled in series with the first connection (1) and the second set (104) is coupled in series with the second connection (2), and control means (105, 109) for controlling said valve means (102). The method comprises the steps of determining at least some of the discrete rates achieved by said actuator, when valves (V1-V4) of the sets (103, 104) are opened and closed in various combinations, selecting from these combinations at least one which, according to a set optimization criterion, realizes the desired rate at each moment of time, and guiding the valves (V1-V4) of said sets to positions complying with the selected combination.

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