

Title (en)
CONTROLLING AN ELECTRIC PROPORTIONAL VALVE

Title (de)
STEUERUNG EINES ELEKTRISCHEN PROPORTIONALVENTILS

Title (fr)
COMMANDE D'UNE SOUPAPE PROPORTIONNELLE ÉLECTRIQUE

Publication
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Application
EP 16169558 A 20160513

Priority
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Abstract (en)
A method for controlling an electric proportional valve (42) of a hydraulic excavator attachment (28) is disclosed. The electric proportional valve (42) is controllable based on an electric input to the electric proportional valve (42). The electric proportional valve (42) is connected to a hydraulic actuator (34) for actuating the hydraulic excavator attachment (28) and to a hydraulic pump (36) for providing a flow of hydraulic fluid to the electric proportional valve (42). The method comprises operating the hydraulic pump (36) at a desired flow rate depending on the hydraulic excavator attachment (28); setting a desired pressure differential (#p) over the electric proportional valve (42); determining an actual pressure differential (#p') over the electric proportional valve (42); determining a pressure deviation (#p - #p') between the desired pressure differential (#p) and the actual pressure differential (#p'); and operating the electric proportional valve (42) such that the actual pressure differential (#p') approaches the desired pressure differential (#p).

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Citation (search report)
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