

Title (en)
Device for actuating a hydraulic user apparatus with an actuation speed that is independent of the resisting load affecting the hydraulic apparatus

Title (de)
Einrichtung zur Betätigung einer hydraulischen Vorrichtung mit einer Betätigungsgeschwindigkeit, die unabhängig von der an der hydraulischen Vorrichtung wirkenden Last ist

Title (fr)
Dispositif pour l'actionnement d'un appareil hydraulique dont la vitesse est indépendante de la charge agissant sur l'appareil hydraulique

Publication
EP 0786598 B1 20000927 (EN)

Application
EP 97100802 A 19970120

Priority
IT MI960117 A 19960124

Abstract (en)
[origin: EP0786598A1] A hydraulic control device for the actuation of a hydraulic user apparatus with an actuation speed that is independent of the resisting load affecting the hydraulic user apparatus. The device comprises a double-acting pilot valve (1), which can be actuated so as to connect a user apparatus actuation branch (A, B) to a pressurized branch (P) of a hydraulic circuit and so as to connect the other user apparatus actuation branch (B, A) to a discharge branch (T) of the hydraulic circuit, and a pressure compensation unit (2), which is arranged on the pressurized branch (P) of the hydraulic circuit entering the pilot valve (1). The pilot valve (1) has: a first inlet (3) connected to the pressurized branch (P1) of the hydraulic circuit; at least one second inlet (4a, 4b) connected to the discharge branch (T) of the hydraulic circuit; a first outlet (5) connected to a first user apparatus actuation branch (A, B); a second outlet (6) connected to the second user apparatus actuation branch (A, B); a first outlet port (7) connected to a first monitoring duct (8); a second outlet port (9) connected to a second monitoring duct (10); a third outlet port (11) connected to a control duct (12) which is connected to the pressure compensation unit (2) to actuate it in contrast with the pressure along the pressurized branch (P) of the hydraulic circuit. The pilot valve (1) has a slider (15) movable on command into three positions: a first position, wherein the slider connects the first inlet (3) to the first outlet (5), to the first port (7), and to the third port (11) and the second inlet (4b) to the second outlet (6) and to the second port (9); a second position, wherein it connects the first inlet (3) to the second outlet (6), to the second port (9), and to the third port (11) and the second inlet (4a) to the first outlet (5) and to the first port (7); and a third position, or idle position, wherein it closes the first inlet (3). <IMAGE>

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Cited by
US8464757B2; EP2157319A1; US2010300552A1; EP1106839A3; US6994116B2; WO2009062572A1; WO02066842A1

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