

Title (en)
HYDRAULIC OIL CYLINDER, CORRELATIVE DEVICE THEREOF, HYDRAULIC CUSHION SYSTEM, EXCAVATOR AND CONCRETE PUMP TRUCK

Title (de)
HYDRAULIKÖLZYLINDER, KORRELATIVE VORRICHTUNG DAMIT, HYDROKISSENSYSTEM, BAGGER UND BETONMISCHER

Title (fr)
VÉRIN À HUILE HYDRAULIQUE, DISPOSITIF ASSOCIÉ À CELUI-CI, SYSTÈME D'AMORTISSEUR HYDRAULIQUE, EXCAVATRICE ET CAMION-POMPE À BÉTON

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Application
EP 11809220 A 20110621

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Abstract (en)
[origin: EP2597319A1] A hydraulic oil cylinder has a cushion collar (4), which is sleeved in the cushion position of a piston rod and can axially slide along the piston rod (3). In the oil cylinder cavity between an oil hole (1-1) of the rod cavity and the terminal position of the piston end surface of the rod cavity during the piston (6) extending movement, a sealing end surface of the rod cavity (1-2) is provided, which can block the cushion collar and contact with the first end surface of the cushion collar to form a sealing surface. At least a throttle oil channel (3-5) is provided between the cushion collar and the piston rod. During the piston extending movement, from the moment that the first end surface of the cushion collar contacts with the sealing end surface of the rod cavity and a sealing surface is formed to the moment that the piston reaches the terminal position of the extending movement, the hydraulic oil at the side of the sealing surface close to the piston can be discharged towards the oil hole of the rod cavity through the throttle oil channel. The hydraulic oil cylinder has advantages of facility of manufacturing the cushion structure and good effect. The hydraulic oil cylinder can be used in a hydraulic cushion system, an excavator and a concrete pump truck.

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F04B 7/04 (2013.01 - US); **F15B 15/222** (2013.01 - EP US)

Citation (search report)
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