

Title (en)
VIRTUALLY OIL-FREE SHOCK ABSORBER HAVING HIGH DISSIPATIVE CAPACITY

Title (de)
PRAKTISCH ÖLFREIE STOSSDÄMPFER MIT HOHER DISSIPATIVER KAPAZITÄT

Title (fr)
AMORTISSEUR A HAUT POUVOIR DISSIPATIF ET PRATIQUEMENT SANS HUILE

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EP 11754405 A 20110907

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Abstract (en)
[origin: WO2012032088A1] The invention relates to a virtually oil-free shock absorber having high dissipative capacity, comprising a rod/piston assembly (2) sliding inside a tubular body (3), said rod/piston assembly (2) defining, together with the tubular body, two working chambers (11A, 11B) containing hydraulic fluid, each working chamber (11A, 11B) being in constant communication with an adjoining chamber (12A, 12B) containing a heterogeneous energy-absorbing/dissipating structure (14, 15) consisting of at least one capillary-porous matrix (14) and an associated liquid (15) with respect to which said matrix is lyophobic. According to the invention, the two adjoining chambers (12A, 12B) are annular chambers provided in the wall of the tubular body (3), on either side of a central portion (28) of said tubular body, each of said annular adjoining chambers (12A, 12B) housing a flexible casing (13A, 3B) containing the associated heterogeneous structure (14, 15), and each of the two working chambers (11A, 11B) is further in communication, via a respective non-return means (22A, 22B), with an associated compensation chamber (17A, 17B), which is arranged in the end of the tubular body (3) in question, said compensation chambers (17A, 17B) ensuring the continuity of the hydraulic fluid when the rod/piston assembly (2) moves inside the tubular body (3).

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