

Title (en)
ACCUMULATOR-FREE HYDRAULIC DRIVE SYSTEM FOR A CONSUMER AND COMPRISING THE SAME, ESPECIALLY FOR HYDRAULIC PRESSES, AND METHOD FOR HYDRAULICALLY DRIVING A CONSUMER WITHOUT AN ACCUMULATOR

Title (de)
DRUCKSPEICHERLOSE HYDRAULISCHE ANTRIEBSANORDNUNG FÜR UND MIT EINEM VERBRAUCHER, INSBESONDERE FÜR HYDRAULISCHE PRESSEN, SOWIE VERFAHREN ZUM DRUCKSPEICHERLOSEN HYDRAULISCHEN ANTREIBEN EINES VERBRAUCHERS

Title (fr)
SYSTÈME DE COMMANDE HYDRAULIQUE SANS ACCUMULATEUR DE PRESSION POUR UN CONSOMMATEUR ET COMPRENANT UN CONSOMMATEUR, EN PARTICULIER POUR DES PRESSES HYDRAULIQUES, ET PROCÉDÉ DE COMMANDE HYDRAULIQUE D'UN CONSOMMATEUR SANS UTILISATION D'UN ACCUMULATEUR DE PRESSION

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Abstract (en)
[origin: WO2010020427A1] The invention relates to an accumulator-free hydraulic drive system and to a method for hydraulically driving a consumer (1) without an accumulator. The drive system comprises a consumer (1) having two pressure compartments (K, R) which act in opposite directions, one of which can be supplied with a pressure medium via a first pressure conduit (D1) and a pump arrangement (20) and the other via a second pressure conduit (D2) and the pump arrangement (20). Said pump arrangement (20) consists of a main feed pump (P1) driven with variable torques for working strokes and of an auxiliary pump (P2) driven with variable torques for return strokes. The delivery direction of the auxiliary pump (P2) can be reversed and the auxiliary pump (P2) can be or is hydraulically connected via a directional valve (13) optionally to the first (K) and/or to the second (R) pressure compartment of the consumer (1).

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Cited by
CN105172196A; DE102014218884A1; DE102014218884B4; US9903394B2; US10718357B2; US11384777B2

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