

Title (en)  
RECIPROCATING DIFFERENTIAL HYDRAULIC MACHINE, ESPECIALLY A DIFFERENTIAL HYDRAULIC MACHINE

Title (de)  
HYDRAULISCHE MASCHINE ODER MOTOR MIT HIN- UND HERBEWEGLICHEM DIFFERENZIALKOLBEN

Title (fr)  
MACHINE HYDRAULIQUE DIFFERENTIELLE A MOUVEMENT ALTERNATIF, EN PARTICULIER MOTEUR HYDRAULIQUE DIFFERENTIEL

Publication  
**EP 1151196 B1 20030730 (FR)**

Application  
**EP 00900619 A 20000120**

Priority  
• FR 0000116 W 20000120  
• FR 9901482 A 19990209

Abstract (en)  
[origin: US6684753B1] A hydraulic machine comprising the following: an envelope (2); a differential piston (15) consisting of two parts (15a,15b) which have a different diameter and are able to move in two corresponding chambers (7,6); hydraulic switching means which are driven by the piston (15) and can take up two stable positions in relation to the piston; control means for a rapid change in the position of the switching means including elastic means (E); and releasing means that can release the energy accumulated by the elastic means at the end of the travel and result in an abrupt change in the position of the switching means. The switching means are supported by a side-walled (27) lantern ring (26) that is coaxial to the piston and is driven by the piston but which can take up two different stable positions in relation to the piston and elastic means (E) are disposed inside the lantern ring (26) and are internally guided by the side wall (27) of said lantern ring (26).

IPC 1-7  
**F04B 13/02**; **F04B 9/107**

IPC 8 full level  
**F04B 9/105** (2006.01); **F03C 1/013** (2006.01); **F03C 1/12** (2006.01); **F04B 9/107** (2006.01); **F04B 9/113** (2006.01); **F04B 13/02** (2006.01)

CPC (source: EP US)  
**F04B 9/107** (2013.01 - EP US); **F04B 13/02** (2013.01 - EP US)

Cited by  
WO2017064197A1; FR2896280A1; CN108138754A; EA034841B1; FR2896279A1; AU2006334588B2; EA013486B1; FR2896281A1; AU2006334587B2; EA013712B1; US8132497B2; US8136441B2; US7975597B2; WO2007080250A1; WO2007080251A1; WO2007080249A1; WO2014111770A1; US10197071B2; WO2022184576A1; FR3120402A1

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DOCDB simple family (application)  
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