

Title (en)  
CLOSED HYDRAULIC SYSTEM

Title (de)  
GESCHLOSSENES HYDRAULIKSYSTEM

Title (fr)  
SYSTEME HYDRAULIQUE FERME

Publication  
**EP 1319126 A1 20030618 (DE)**

Application  
**EP 01964916 A 20010817**

Priority  
• DE 0103162 W 20010817  
• DE 10046323 A 20000919

Abstract (en)  
[origin: WO0225096A1] The invention relates to a closed hydraulic system, especially a hydraulic play compensation system, comprising at least one cylinder (1) and a piston (2, 3) having guide surfaces and an adjustment gap placed therebetween. In order to rapidly and thoroughly carry out degasification of the adjustment gap required for working efficiency, the guide surfaces (25, 26) of the piston (2, 3) especially has fine grooves (27).

IPC 1-7  
**F02M 51/06**; **F02M 59/46**; **F02M 61/16**

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 59/46** (2006.01); **F02M 61/16** (2006.01)

CPC (source: EP)  
**F02M 51/0603** (2013.01); **F02M 61/167** (2013.01); **F02M 63/0026** (2013.01)

Citation (search report)  
See references of WO 0225096A1

Citation (examination)  
WO 9949209 A1 19990930 - MTU FRIEDRICHSHAFEN GMBH [DE], et al

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 0225096 A1 20020328**; DE 10046323 A1 20020418; DE 10046323 B4 20040212; EP 1319126 A1 20030618

DOCDB simple family (application)  
**DE 0103162 W 20010817**; DE 10046323 A 20000919; EP 01964916 A 20010817