

Title (en)  
ELECTROMAGNETIC POSITIONING DEVICE

Publication  
**EP 0405187 B1 19930929 (DE)**

Application  
**EP 90110559 A 19900605**

Priority  
DE 3920931 A 19890627

Abstract (en)  
[origin: EP0405187A1] In order to adjust the stroke of a control element (15) which is actuated electromagnetically by a spring-mass oscillation system (5,13,50), for displacement machines and in order to permit a free arrangement of the electromagnetic positioning device in the housing (8), in particular in a cylinder head of a displacement machine, the movement of the positioning device is transmitted to the control element, in particular one or more stroke valves or flat slide valves by means of a mechanical or hydraulic transmission system (10) with a variable transmission ratio. In addition, devices (54,55) are described for exactly setting the position of equilibrium of the oscillating system. The electromagnetic positioning device can also be combined with a limit position damper (7) or with a hydraulic compensation element (51) of known design. <IMAGE>

IPC 1-7  
**F01L 9/04**; **F01L 31/22**

IPC 8 full level  
**F01L 9/20** (2021.01); **F01L 13/00** (2006.01); **F01L 31/22** (2006.01)

CPC (source: EP US)  
**F01L 1/182** (2013.01 - EP US); **F01L 9/20** (2021.01 - EP US); **F01L 13/0015** (2013.01 - EP US); **F01L 2001/188** (2013.01 - EP US); **Y10T 74/20882** (2015.01 - EP US)

Cited by  
EP0799394A4; FR2989416A1; EP0867898A1; US5730102A; EP1087110A1; WO9605415A1; US6427650B1

Designated contracting state (EPC)  
AT CH DE ES FR GB IT LI SE

DOCDB simple family (publication)  
**EP 0405187 A1 19910102**; **EP 0405187 B1 19930929**; AT E95277 T1 19931015; DE 3920931 A1 19910103; DE 59002881 D1 19931104; US 5117213 A 19920526

DOCDB simple family (application)  
**EP 90110559 A 19900605**; AT 90110559 T 19900605; DE 3920931 A 19890627; DE 59002881 T 19900605; US 54293190 A 19900625