

Title (en)

ELECTROMAGNETICALLY CONTROLLED CONNECTING UNIT FOR A CAM-ACTUATED INJECTION SYSTEM OF AN INTERNAL COMBUSTION ENGINE

Title (de)

ELEKTROMAGNETISCH GESTEUERTE AUFSCHALTEINHEIT FÜR NOCKENBETÄTIGTE EINSPRITZANLAGE EINER BRENNKRAFTMASCHINE

Title (fr)

UNITE D'OUVERTURE A COMMANDE ELECTROMAGNETIQUE POUR SYSTEME D'INJECTION COMMANDE PAR CAME D'UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1570173 A1 20050907 (DE)

Application

EP 04797953 A 20041117

Priority

- DE 10354919 A 20031125
- EP 2004013039 W 20041117

Abstract (en)

[origin: WO2005059351A1] Disclosed is an electromagnetically controlled connecting unit for controlling the passage of a fluid-conducting junction between the high-pressure system and the low-pressure system of a cam-actuated injection system in a self-igniting internal combustion engine. Said electromagnetically controlled connecting unit comprises: - a driving slide (1) that is guided in a precisely fitting manner within an axial guiding bore (32) of a slide cylinder (3), which is fluidically connected to the high-pressure system (37); - an overflow chamber (39) that is fluidically connected to the guiding bore (32) via an electrically controlled magnetic valve (9, 10, 2) while being fluidically connected to the low-pressure system (38) via an overflow chamber bore (50); - a transversal bore (42) that crosses the guiding bore (32) and is connected to the high-pressure system (37) at one end and to the low-pressure system (38) at the other; - a block control bore (17) which extends into the guiding bore (32) downstream of the transversal bore (42) in the direction of displacement of the driving slide counter to the restoring force of the slide spring (12), said block control bore (17) being fluidically connected to the low-pressure system (38).

IPC 1-7

F02M 59/36; **F02M 57/02**; **F02M 59/46**; **F02M 45/04**; **F02M 45/08**

IPC 8 full level

F02M 45/06 (2006.01); **F02M 45/08** (2006.01); **F02M 55/00** (2006.01); **F02M 57/02** (2006.01); **F02M 59/36** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP)

F02M 45/06 (2013.01); **F02M 45/08** (2013.01); **F02M 55/00** (2013.01); **F02M 57/023** (2013.01); **F02M 59/366** (2013.01); **F02M 59/466** (2013.01); **F02M 63/0029** (2013.01)

Citation (search report)

See references of WO 2005059351A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 10354919 A1 20050630; EP 1570173 A1 20050907; WO 2005059351 A1 20050630

DOCDB simple family (application)

DE 10354919 A 20031125; EP 04797953 A 20041117; EP 2004013039 W 20041117