

Title (en)

CONTROL VALVE SYSTEM USED IN A FUEL INJECTOR FOR INTERNAL COMBUSTION ENGINES

Title (de)

STEUERVENTILANORDNUNG ZUM EINSATZ IN EINEM KRAFTSTOFFINJEKTOR FÜR VERBRENNUNGSMOTOREN

Title (fr)

SYSTEME DE SOUPAPE DE COMMANDE DESTINE A ETRE UTILISE DANS UN INJECTEUR DE CARBURANT DE MOTEURS A COMBUSTION INTERNE

Publication

**EP 1203153 A1 20020508 (DE)**

Application

**EP 00963891 A 20000808**

Priority

- DE 0002642 W 20000808
- DE 19937713 A 19990810

Abstract (en)

[origin: WO0111227A1] The invention relates to a control valve system (5) used in a fuel injector (1) for internal combustion engines. Said control valve system contains a valve body (17) that can be axially displaced in a valve chamber by means of an actuation device (40). Said valve body consists of two rigidly connected sections (17a, 17b). A first section (17a) of the valve body (17) forms a seat valve (18, 50) between the inlet (7) and the outlet (23) of the valve in a first section (41a) of the valve chamber. Said seat valve is closed in a rest position of the valve body (17) and opened in a working position of said valve body (17). A second section (17b) of the valve body (17) and a second section (41b) of the valve chamber form a sliding valve which produces a fluidic communication between the valve outlet (23) and a return hole (49) in the rest position of the valve body (17) and blocks fluidic communication between the seat valve (18, 50) and the valve outlet (23) and which closes the return hole (49) and then starts producing fluidic communication between the seat valve (17, 50) and the valve outlet (23) only after it leaves the rest position

IPC 1-7

**F02M 59/10**; **F02M 57/02**; **F02M 59/46**

IPC 8 full level

**F02M 57/02** (2006.01); **F02M 59/10** (2006.01); **F02M 59/46** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP US)

**F02M 57/025** (2013.01 - EP US); **F02M 59/105** (2013.01 - EP US); **F02M 59/466** (2013.01 - EP US); **F02M 59/468** (2013.01 - EP US)

Citation (search report)

See references of WO 0111227A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 0111227 A1 20010215**; DE 19937713 C1 20010315; DE 50011460 D1 20051201; EP 1203153 A1 20020508; EP 1203153 B1 20051026; US 2002109014 A1 20020815; US 6494383 B2 20021217

DOCDB simple family (application)

**DE 0002642 W 20000808**; DE 19937713 A 19990810; DE 50011460 T 20000808; EP 00963891 A 20000808; US 7355302 A 20020211