

Title (en)

FUEL INJECTING DEVICE FOR INTERNAL COMBUSTION ENGINE

Title (de)

BRENNSTOFFEINSPRITZVORRICHTUNG FÜR BRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication

EP 1248904 A1 20021016 (FR)

Application

EP 00981424 A 20001117

Priority

- FR 0003194 W 20001117
- FR 9914548 A 19991119

Abstract (en)

[origin: WO0136813A1] The invention concerns a fuel injection device for an internal combustion engine comprising an injector, characterised in that said injector is arranged in the injection orifice (5), means for causing the nozzle (3) to vibrate cyclically such as a transducer (1) controlled in duration and in intensity by the engine electronic control system, and closure means (7) returned by elastic return means against the end (6) of the nozzle (3), said elastic return means being formed by a rod (4) passing through the injector body up to a cavity (10) located at the opposite end relative to the injection orifice (5), said rod co-operating with a chassis ground (8) and damping means (9) housed in said cavity (10), the vibrating of the nozzle (3) and the closure means (7) ensuring the ejection of a predetermined amount of fuel.

IPC 1-7

F02M 69/04; B05B 17/06; F02M 51/06; F02M 61/08

IPC 8 full level

F02M 51/06 (2006.01); **F02M 69/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

F02M 51/0603 (2013.01); **F02M 69/041** (2013.01); **F02M 2200/306** (2013.01)

Citation (search report)

See references of WO 0136813A1

Cited by

FR2907544A1

Designated contracting state (EPC)

BE DE GB

DOCDB simple family (publication)

WO 0136813 A1 20010525; DE 60025530 D1 20060406; DE 60025530 T2 20060810; EP 1248904 A1 20021016; EP 1248904 B1 20060111; FR 2801346 A1 20010525; FR 2801346 B1 20021031

DOCDB simple family (application)

FR 0003194 W 20001117; DE 60025530 T 20001117; EP 00981424 A 20001117; FR 9914548 A 19991119