

Title (en)

INTERNAL COMBUSTION ENGINE FUEL INJECTING DEVICE

Title (de)

KRAFTSTOFFEINSPRITZVORRICHTUNG FÜR BRENNKRAFTMASCHINEN

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT POUR MOTEUR A COMBUSTION INTERNE

Publication

**EP 0977946 A1 20000209 (FR)**

Application

**EP 98921556 A 19980417**

Priority

- FR 9800778 W 19980417
- FR 9705129 A 19970425

Abstract (en)

[origin: FR2762648A1] The invention concerns an internal combustion engine fuel injecting device (1) connected to a circuit (2) supplying fuel under adapted pressure, said injector (1) comprising an injection nozzle (8) at the end (14) of which is arranged at least an aperture for injecting fuel (10). The invention is characterised in that said injector (1) co-operates with cyclic vibration means (6) controlled by the engine electronic control system to cause the injection nozzle (8) to vibrate, said injection nozzle (8) being adapted to eject a predetermined amount of fuel at each one of its oscillations.

IPC 1-7

**F02M 69/04; F02M 27/08; F02M 51/08**

IPC 8 full level

**F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 61/18** (2006.01); **F02M 69/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

**F02M 51/0603** (2013.01); **F02M 61/18** (2013.01); **F02M 69/041** (2013.01); **F02M 69/044** (2013.01)

Citation (search report)

See references of WO 9849443A1

Designated contracting state (EPC)

DE ES GB IT

DOCDB simple family (publication)

**FR 2762648 A1 19981030; FR 2762648 B1 19990604**; EP 0977946 A1 20000209; WO 9849443 A1 19981105

DOCDB simple family (application)

**FR 9705129 A 19970425**; EP 98921556 A 19980417; FR 9800778 W 19980417