

Title (en)
Fuel injection system

Title (de)
Brennstoffeinspritzanlage

Title (fr)
Système d'injection de carburant

Publication
EP 1139449 A1 20011004 (EN)

Application
EP 00107203 A 20000401

Priority
EP 00107203 A 20000401

Abstract (en)
Fuel injection system having a piezoelectric element for controlling the amount of injected fuel into a combustion engine, wherein electric power for driving the piezoelectric element is supplied by an electric power source, and wherein the fuel injection system comprises a controllable voltage converter disposed between the piezoelectric element and the electric power source and a control unit for adjusting a current between the electric power source and the controllable voltage converter to a value between 0 ampere and a maximum current. <IMAGE>

IPC 1-7
H01L 41/04; F02D 41/20; F02M 51/06

IPC 8 full level
F02D 41/20 (2006.01)

CPC (source: EP)
F02D 41/2096 (2013.01); F02D 2041/2003 (2013.01)

Citation (applicant)

- EP 0371469 B1 19950208 - TOYOTA MOTOR CO LTD [JP]
- EP 0379182 B1 19940413 - TOYOTA MOTOR CO LTD [JP]
- DE 19742073 A1 19990325 - BOSCH GMBH ROBERT [DE]
- DE 19729844 A1 19990114 - BOSCH GMBH ROBERT [DE]

Citation (search report)

- [X] US 5036263 A 19910730 - YAMADA YASUFUMI [JP], et al
- [X] US 4749897 A 19880607 - NATSUME YOSHIMI [JP], et al
- [DA] EP 0371469 A2 19900606 - TOYOTA MOTOR CO LTD [JP]
- [A] GB 2334164 A 19990811 - BOSCH GMBH ROBERT [DE]

Cited by
DE102005001282A1; DE102005001282B4; WO2004022957A1

Designated contracting state (EPC)
DE

DOCDB simple family (publication)
EP 1139449 A1 20011004

DOCDB simple family (application)
EP 00107203 A 20000401