

Title (en)

Control circuit for fuel injectors of a vehicle

Title (de)

Ansteuerschaltung für Kraftstoffinjektoren eines Fahrzeugs

Title (fr)

Dispositif de pilotage d'injecteurs de carburant pour véhicule automobile

Publication

EP 1420156 A3 20050309 (FR)

Application

EP 03292787 A 20031106

Priority

FR 0214147 A 20021113

Abstract (en)

[origin: EP1420156A2] The fuel injectors have multiple piezoelectric cells (16) to atomize the fuel. Control of the resonant fuel injectors uses a processing circuit (10,12) which monitors the periodic excitation of a fuel injector, and a selector (14) for the piezoelectric cells to be excited. The magnitudes of electric signals in the excitation circuit are monitored to detect dysfunction of the injectors.

IPC 1-7

F02D 41/22; F02D 41/20; H01L 41/04

IPC 8 full level

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CPC (source: EP)

F02D 41/2096 (2013.01); **F02D 41/221** (2013.01); **F02D 41/30** (2013.01); **F02D 2041/2093** (2013.01)

Citation (search report)

- [XY] US 2001039484 A1 20011108 - FREUDENBERG HELLMUT [DE], et al
- [XY] FR 2776087 A1 19990917 - SIEMENS AG [DE]
- [XY] EP 1139443 A1 20011004 - BOSCH GMBH ROBERT [DE]
- [YA] US 6109245 A 20000829 - EGGER KLAUS [DE], et al
- [YA] DE 19709716 A1 19980514 - SIEMENS AG [DE]
- [A] DE 19927087 A1 20001221 - BOSCH GMBH ROBERT [DE]
- [A] DE 19709715 A1 19980520 - SIEMENS AG [DE]

Cited by

EP1927743A1; US8296044B2; US7822537B2; WO2008061994A1

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