

Title (en)

Fuel injector having extended voltage range

Title (de)

Brennstoffeinspritzventil mit erweitertem Spannungsbereich

Title (fr)

Soupape d'injection de carburant à plage de tension étendue

Publication

**EP 0999355 A3 20010328 (EN)**

Application

**EP 99121154 A 19991022**

Priority

- US 10676098 P 19981103
- US 20642198 A 19981207

Abstract (en)

[origin: EP0999355A2] A fuel injector apparatus includes an electromagnetic fuel injector having a housing and a magnetic circuit in the housing. The magnetic circuit including an electromagnetic coil constructed and arranged to operate at a nominal voltage to open the fuel injector. The nominal voltage is substantially less than a supply voltage. Circuit structure is electrically coupled with the coil and is constructed and arranged to step-down the supply voltage to be substantially the nominal voltage at the coil. <IMAGE>

IPC 1-7

**F02D 41/20**

IPC 8 full level

**F02D 41/20** (2006.01)

CPC (source: EP)

**F02D 41/20** (2013.01); **F02D 2041/2051** (2013.01)

Citation (search report)

- [X] US 3682144 A 19720808 - SUDA SEIJI
- [A] US 5402302 A 19950328 - BOUCHERON JEAN-LOUIS [FR]
- [A] DE 3129610 A1 19830217 - BOSCH PIERBURG SYSTEM OHG [DE]
- [X] PATENT ABSTRACTS OF JAPAN vol. 012, no. 208 (M - 709) 15 June 1988 (1988-06-15)
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 122 (E - 500) 16 April 1987 (1987-04-16)

Cited by

DE10305772B4

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0999355 A2 20000510; EP 0999355 A3 20010328**

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