

Title (en)
Injector system

Title (de)
Treiberschaltung für eine Kraftstoff-Einspritzdüse

Title (fr)
Circuit de commande pour injecteur de carburant

Publication
EP 1400676 A2 20040324 (EN)

Application
EP 03255966 A 20030923

Priority
• US 25223702 A 20020923
• US 40371303 A 20030331

Abstract (en)
A drive circuit (20a,20b,20c) is provided in a full H-bridge and half H-bridge configuration for controlling one or more fuel injectors (12;12a,12b). The drive circuit (20a,20b,20c) includes a voltage input (22) for receiving a voltage signal, at least one energy storage device (C1;C11,C12;C21;C22) coupled to the voltage input (22) for storing an electrical charge, a bidirectional current path (26) coupled to the injector (12;12a,12b), at least one inductor (L1;L11;L21,L22) coupled to the injector, and switching means for controlling current flow through the injector and the inductor to open and close the injector. The switching means is controlled to provide a recirculation current to recover energy stored in the injector for storage in the energy storage device. A method of operating a drive circuit to control at least one fuel injector to reduce voltage ringing in the circuit is also described.

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F02D 41/20; H01L 41/04

IPC 8 full level
F02D 41/20 (2006.01); H01L 41/04 (2006.01)

CPC (source: EP)
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Cited by
EP1927742A1; EP1860308A1; DE102009025478A1; EP2400134A1; US9048775B2; US9611797B2; WO2008116747A1; EP2290211A1; EP2428670A1

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