

Title (en)

Current control process for an electromagnetically operated lift valve of an internal combustion engine

Title (de)

Stromsteuerverfahren für ein elektromagnetisch betätigtes Hubventil

Title (fr)

Procédé de contrôle de courant pour une soupape à actionnement électromagnétique de moteur à combustion interne

Publication

**EP 0870905 B1 20020904 (DE)**

Application

**EP 98100651 A 19980115**

Priority

DE 19714518 A 19970408

Abstract (en)

[origin: EP0870905A1] The valves of the internal combustion engine are opened by solenoid drives and are closed by return springs. To provide a quiet operation two solenoids are fitted to each valve which are operated in alternate modes to provide the reciprocating drive for the valve. The transfer of the armature from one solenoid to the other involves a controlled current pattern for the second solenoid to capture the armature and enable it to bring the valve to a stop with a minimum of noise. The capture current (I<sub>f</sub>) is followed by a two-stage holding current (I<sub>a</sub>, I<sub>h</sub>) to ensure the armature, and hence the valve, is held in the selected position. The function of the solenoids is reversed when the valve movement is in the opposite direction.

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IPC 8 full level

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CPC (source: EP)

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