

Title (en)  
ARRANGEMENT FOR INTERMITTENT FUEL INJECTION

Publication  
**EP 0158867 A3 19870107 (DE)**

Application  
**EP 85103442 A 19850323**

Priority  
DE 3411402 A 19840328

Abstract (en)  
[origin: EP0158867A2] 1. An arrangement for the intermittent actuation of a control member on an Otto engine, in which the beginning of the actuation operation can be controlled during each crankshaft period, wherein characteristic values are stored in address locations of a characteristic family storage means (18) which can be called up by rotary speed values and by other operating conditions, wherein during each crankshaft revolution angle pulse (line, 5, 21) which are synchronous in respect of crankshaft angle, and a reference pulse (line 9, 23) are produced, from which a trigger pulse for the beginning is derived, wherein an address counter (20) is connected with its reset input to the reference pulse line (23) and with its counting input to the angle line (21), wherein the characteristic family storage means (18) is connected on the one hand to the multi-bit address line array (22) of the address counter (20) and on the other hand to a multi-bit-line of an operating condition selector (19), wherein a time base counter (28) is connected to the cut-in input (26) of the characteristic family storage means (18) and prepares the storage means (18) during a predetermined time base, wherein a trigger pulse is applied to the reset input of a counter (12) for actuation of the control member and therein the O-output (15) of the counter (12) directly controls a control stage (16) for the actuating member, characterized by the following features : a) the actuating member is a valve control stage (16) for the injection system ; b) an overflow output (25) of the address counter (20) is connected to the blocking input (24) thereof ; c) the characteristic family storage means contains multi-bit storage words for representing the injection duration ; d) connected on the output side of the characteristic field storage means (18) is an intermediate storage means (13) into which the selected multi-bit storage word of the characteristic family storage means (18) is transferred upon expiry of the time base ; and e) the intermediate storage means (13) supplies a preload value for an injection counter (12) and a clock oscillator supplies counting pulses for the injection counter.

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**F02D 41/2403** (2013.01); **F02D 41/2409** (2013.01)

Citation (search report)  
• [X] DE 2040209 A1 19710318 - LUCAS INDUSTRIES LTD  
• [XD] DE 3128922 C1 19821111 - ATLAS ALUMINIUM FAHRZEUGTECH  
• [A] US 4142483 A 19790306 - IRONSIDE JOHN M  
• [A] FR 2289744 A1 19760528 - LUCAS ELECTRICAL CO LTD [GB]  
• [A] US 3846760 A 19741105 - IRONSIDE J  
• [A] US 4398520 A 19830816 - SCHULZ ALFRED [DE], et al  
• [A] US 3935846 A 19760203 - ZELENKA HERMANN

Cited by  
US5666329A; EP0445329A1; US7305970B2; WO2005071248A1; WO9507501A1; US8211184B2; US8574306B2

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