

Title (en)  
Driver circuit for electromagnet

Title (de)  
Elektromagnettreiberschaltung

Title (fr)  
Circuit d'attaque pour électroaimant

Publication  
**EP 0837479 B1 20030115 (DE)**

Application  
**EP 97117371 A 19971008**

Priority  
US 73147296 A 19961016

Abstract (en)  
[origin: MX9707840A] An electrical circuit applies as oscillatory electrical current to a coil of a solenoid in order to cause the solenoid to move in response to a command signal. The circuit includes a signal divider for generating an upper peak current signal value from the command signal and a lower peak current signal value which is a fixed percentage of the voltage representing current through the coil. A first comparator compares the current sense voltage to the upper current signal value. A second comparator compares the current driver on and off. A current driver applies a driving current to the solenoid coil as a function of output signals generated by the first and second comparators so that the coil current will have a lower peak current value which is substantially a fixed percentage of the upper peak current value.

IPC 1-7  
**H01F 7/18**; **G05D 16/20**

IPC 8 full level  
**F16K 31/06** (2006.01); **G05B 11/28** (2006.01); **H01F 7/18** (2006.01)

CPC (source: EP US)  
**H01F 7/1844** (2013.01 - EP US); **H01F 2007/1855** (2013.01 - EP US)

Cited by  
DE102013103387A1; CN104633225A

Designated contracting state (EPC)  
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**EP 0837479 A2 19980422**; **EP 0837479 A3 19990113**; **EP 0837479 B1 20030115**; AR 010497 A1 20000628; AU 3996197 A 19980514; AU 693746 B2 19980702; BR 9705040 A 19990330; CA 2209425 A1 19980416; CA 2209425 C 20000222; DE 59709139 D1 20030220; ES 2185854 T3 20030501; JP 3068043 B2 20000724; JP H10125529 A 19980515; MX 9707840 A 19980430; US 5748431 A 19980505

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