

Title (en)  
IGNITION CIRCUIT

Publication  
**EP 0127205 B1 19890104 (EN)**

Application  
**EP 84200410 A 19840322**

Priority  
GB 8308405 A 19830326

Abstract (en)  
[origin: GB2138495A] A periodic signal provided by a magnetic sensor 3 is compared with two reference potentials by means of two comparators 13 and 15. An output signal provided by one comparator 13 is used to enable the supply of current to an ignition coil 39 whilst an output signal provided by the second comparator 15 is used to switch off the current in the ignition coil. In this way the switching on and off of the flow of current through the ignition coil are made independent of one another enabling more accurate ignition timing to be obtained at all engine speeds. The coil current is regulated by a circuit including an operational amplifier 58 and the reference potential supplied to the comparator 13 is increased as the speed of the engine decreases so that the time period for which the coil current is at its maximum value is a constant proportion of the period of the sensor waveform despite changes in engine speed. To prevent malfunction of the system at low engine speeds and low supply voltage, a switch 69 controlled by a speed detector 70 and a voltage detector 75 are provided to step down the waveform Vsc supplied to the comparator 13. An over voltage protection circuit 84-90 is provided for Darlington transistors 28, 29. <IMAGE>

IPC 1-7  
**F02P 3/04**

IPC 8 full level  
**F02P 3/045** (2006.01); **F02P 3/055** (2006.01)

CPC (source: EP)  
**F02P 3/0453** (2013.01); **F02P 3/0552** (2013.01)

Designated contracting state (EPC)  
DE FR IT

DOCDB simple family (publication)  
**GB 2138495 A 19841024**; **GB 2138495 B 19870218**; **GB 8308405 D0 19830505**; DE 3475934 D1 19890209; EP 0127205 A2 19841205; EP 0127205 A3 19850410; EP 0127205 B1 19890104; SG 41189 G 19891222

DOCDB simple family (application)  
**GB 8308405 A 19830326**; DE 3475934 T 19840322; EP 84200410 A 19840322; SG 41189 A 19890710