

Title (en)
DWELL CIRCUITRY FOR AN INGNITION CONTROL SYSTEM

Publication
EP 0031834 B1 19860910 (EN)

Application
EP 80901351 A 19801230

Priority
• US 4901379 A 19790615
• US 4901479 A 19790615

Abstract (en)
[origin: WO8002862A1] Digital dwell circuitry (121) for a spark and dwell ignition control system (10) Maximum advance (15, 16) and reference (17, 18) sensors are utilized to produce pulse transitions (t_{uA} , t_{uR}) which determine positions of maximum and minimum possible advance for spark ignition with respect to the position of the engine crankshaft. For each maximum advance sensor pulse transition (t_{uA}) a main counter (41) starts a sequential running count of speed independent clock pulses (C_{u1}) wherein the maximum count obtained by the counter is related to engine crankshaft speed. The running and maximum counts of the main counter (41) are utilized by dwell circuitry (121) to determine the time (t_{uDW}) prior to the next maximum advance pulse (t_{uA}) at which spark coil excitation should occur. The main counter running count also determines several inputs to a read only memory (ROM) circuit (48) whose output controls a rate multiplier (53). The rate multiplier (53) receives input clock signals (C_2), provides selective frequency division for these clock signals in accordance with the ROM output, and the output of the rate multiplier is coupled to an accumulator means (80, 81, 82) whose accumulated count is utilized to determine the occurrence of spark ignition by terminating spark coil excitation.

IPC 1-7
F02P 5/15; **G06F 1/02**

IPC 8 full level
F02P 3/045 (2006.01); **F02P 5/04** (2006.01)

CPC (source: EP KR)
F02P 3/0456 (2013.01 - EP); **F02P 5/04** (2013.01 - KR)

Citation (examination)
DE 2812325 A1 19780928 - MOTOROLA INC

Designated contracting state (EPC)
DE FR GB SE

DOCDB simple family (publication)
WO 8002862 A1 19801224; BR 8008711 A 19810414; DE 3071748 D1 19861016; EP 0031834 A1 19810715; EP 0031834 A4 19811027; EP 0031834 B1 19860910; KR 840002246 B1 19841207; KR 840002247 B1 19841207; MX 148469 A 19830425

DOCDB simple family (application)
US 8000682 W 19800609; BR 8008711 A 19800609; DE 3071748 T 19800609; EP 80901351 A 19801230; KR 800002357 A 19800614; KR 830003761 A 19830811; MX 18275980 A 19800613