

Title (en)
DUTY RATIO MEASURING SYSTEM FOR VARIABLE FREQUENCY PULSES

Publication
EP 0242446 B1 19900307 (DE)

Application
EP 86117559 A 19861217

Priority
DE 3611565 A 19860407

Abstract (en)
[origin: US4841451A] In a system for measuring the duration ratio of pulses of variable frequency, particularly in electronically controlled fuel-injection systems for internal-combustion engines, there are derived clock pulses to the frequency of which a predetermined multiple of the frequency of the pulses (input pulses) corresponds. The duration ratio is then determined by counting the clock pulses during each one pulse. For duration ratios of 0% and 100%, corresponding values are delivered independently of the counting.

IPC 1-7
F02D 35/00; F02D 41/02; F02D 41/24; F02D 41/32; F02P 5/04; G01R 23/00

IPC 8 full level
G01R 29/02 (2006.01); **F02D 35/00** (2006.01); **F02D 41/02** (2006.01); **F02D 41/24** (2006.01); **F02D 41/32** (2006.01); **F02P 5/04** (2006.01); **G01R 23/00** (2006.01)

CPC (source: EP US)
F02D 35/0007 (2013.01 - EP US); **F02D 41/32** (2013.01 - EP US); **F02D 2041/2027** (2013.01 - EP US)

Cited by
US5592921A; WO9516118A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0242446 A2 19871028; EP 0242446 A3 19881117; EP 0242446 B1 19900307; BR 8701584 A 19880126; DE 3611565 A1 19871008; DE 3669348 D1 19900412; JP S6311870 A 19880119; US 4841451 A 19890620

DOCDB simple family (application)
EP 86117559 A 19861217; BR 8701584 A 19870406; DE 3611565 A 19860407; DE 3669348 T 19861217; JP 8396887 A 19870407; US 3555687 A 19870407