

Title (en)

Accumulator fuel injection control apparatus and method

Title (de)

Akkumulator-Kraftstoffeinspritzvorrichtung und Steuerungsverfahren

Title (fr)

Dispositif et procédé de commande d'injection de combustible du type à accumulation

Publication

EP 1022452 B1 20031001 (EN)

Application

EP 00100581 A 20000112

Priority

- JP 1632399 A 19990125
- JP 6028299 A 19990308

Abstract (en)

[origin: EP1022452A2] An accumulator fuel injection control apparatus and method which performs fuel injection control with high precision is proposed. This accumulator fuel injection control apparatus is equipped with detection means (14) for detecting an actual measurement value of fuel injection pressure of fuel injected into an engine (1), estimation means (22) for estimating a predictive value of fuel injection pressure, fuel injection amount calculation means (21) for calculating a fuel injection amount using either the actual measurement value or the predictive value, and fuel injection means (2) for injecting fuel into the engine based on the fuel injection amount calculated by the fuel injection amount calculation means (21). The detection means (14) measures the actual measurement value at a first timing (t1), and the fuel injection means (2) injects fuel at a second timing (t2). If an arithmetic processing of the actual measurement value measured at the first timing (t1) is in time for the second timing (t2), the fuel injection amount calculation means (21) calculates a fuel injection amount using a result of the arithmetic processing of the actual measurement value (S50). If the arithmetic processing is not in time for the second timing, the fuel injection amount calculation means (21) calculates the fuel injection amount using the predictive value (S46). <IMAGE>

IPC 1-7

F02D 41/38; F02M 63/02

IPC 8 full level

F02D 41/38 (2006.01); F02M 63/00 (2006.01); F02M 63/02 (2006.01)

CPC (source: EP)

F02D 41/3809 (2013.01); F02M 63/0007 (2013.01); F02M 63/0225 (2013.01); F02D 2200/0602 (2013.01); F02D 2200/0604 (2013.01); F02D 2250/12 (2013.01)

Cited by

CN105822448A; EP1347165A3; EP1424480A1; EP1975398A3; FR2790515A1; DE102006000167B4; CN108180082A; KR20180065941A; US7210459B2; US6997164B2; WO2011134853A1; WO03093668A1; US6843053B2; US7047941B2; EP1975398A2; US7556023B2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 1022452 A2 20000726; EP 1022452 A3 20020130; EP 1022452 B1 20031001; DE 60005575 D1 20031106; DE 60005575 T2 20040805; ES 2204365 T3 20040501

DOCDB simple family (application)

EP 00100581 A 20000112; DE 60005575 T 20000112; ES 00100581 T 20000112