

Title (en)

Method of driving fuel injectors arranged in an intake pipe above and below a butterfly valve

Title (de)

Verfahren zum Antrieben von Kraftstoffeinspritzern, die in einer Aufnahmleitung ober- und unterhalb des Schmetterlingsventils angeordnet sind

Title (fr)

Procédé de commande d'injecteurs de carburant disposés dans un tuyau d'arrivée au-dessus et en dessous d'un vanne papillon

Publication

EP 2163750 A1 20100317 (EN)

Application

EP 08425605 A 20080916

Priority

EP 08425605 A 20080916

Abstract (en)

A method of driving fuel injectors (8,9) arranged along an intake pipe (3) above and below a butterfly valve (7) in an internal combustion engine (1); the driving method comprises the steps of: connecting, during the construction of the system, a first fuel injector (9) arranged "below" the butterfly valve (7) and a second fuel injector (8) arranged "above" the butterfly valve (7) to a same output (11) of an electronic control unit (10) by means of a switch (12); actuating, during normal operation, the switch (12) for selectively connecting either the first fuel injector (9) or the second fuel injector (8) to the electronic control unit so as to inject the fuel by alternatively using the first fuel injector (9) or the second fuel injector (8); and carrying out, for a given number of times before switching from the first fuel injector (9) to the second fuel injector (8), a step of adapting which comprises normally driving the first fuel injector (9) for feeding the amount of fuel required for the combustion, and driving the second fuel injector (8) during the dead times of the first fuel injector (9) for feeding an amount of fuel functional to the formation of a fluid fuel film on the walls of the intake pipe (3).

IPC 8 full level

F02D 41/04 (2006.01); **F02M 69/04** (2006.01)

CPC (source: EP)

F02D 41/047 (2013.01); **F02D 41/3094** (2013.01); **F02M 69/043** (2013.01); **F02M 69/044** (2013.01)

Citation (search report)

- [A] JP S63147953 A 19880620 - HONDA MOTOR CO LTD
- [A] US 2005172933 A1 20050811 - TAKEUCHI YOSHIAKI [JP], et al
- [A] EP 1260695 A2 20021127 - HONDA MOTOR CO LTD [JP]

Cited by

US9617946B2; WO2014000946A1

Designated contracting state (EPC)

DE FR IT

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2163750 A1 20100317; EP 2163750 B1 20110316; DE 602008005587 D1 20110428

DOCDB simple family (application)

EP 08425605 A 20080916; DE 602008005587 T 20080916