

ABSTRACT

Title of the invention: IMPROVEMENT TO A DEVICE FOR CONVERTING TO BIOETHANOL, ARRANGED TO PRODUCE A MODIFIED INJECTION SIGNAL

5

The invention relates to a device for converting a fuel-injection engine initially intended to operate with a first fuel, the converting device allowing a user to make the engine operate with a second fuel of composition different from a composition of the first fuel, the second fuel for example being a bioethanol fuel or a mixture of unleaded fuel and bioethanol fuel, the converting device being arranged to deliver, on the basis of an original injection signal (SI) received from an engine control unit, an adapted injection signal (SM) to an injector of the engine, said converting device (1) comprising:

10

- a circuit (60) for analyzing the original injection signal (SI), comprising a circuit (61) for measuring the original injection signal and a detecting circuit (67) arranged to detect an end time of the original injection signal when the measured signal decreases and drops below an end threshold,

15

- a signal generator (70) arranged to produce a complementary injection signal (SC) starting from the end time of the original injection signal, and

20

- a switching circuit (80) arranged to, in succession, transmit the original injection signal (SI) to the injector then deliver the complementary injection signal (SC) to the injector, the original injection signal (SI) and the complementary injection signal (SC) together forming the adapted injection signal (SM).

25

The converting device is characterized in that the analyzing circuit (60) also comprises an updating circuit (68b) arranged to update a value of the end threshold (FT) depending on the measured signal.

The invention also relates to a method associated with the converting device described above.

30 FIGURE FOR THE ABSTRACT: figure 2