

Title (en)

MEASUREMENT APPARATUS FOR CONTINUOUSLY DETERMINING OPERATING PARAMETERS OF A COMBUSTION ENGINE

Publication

EP 0119297 B1 19890503 (DE)

Application

EP 83110244 A 19831014

Priority

DE 3242317 A 19821116

Abstract (en)

[origin: US4541271A] The invention is directed to a measuring arrangement for detecting injection-begin in an internal combustion engine equipped with fuel injection valves. The measuring arrangement includes an inductive position transducer controlled by a current source. The current source is regulated against changes in the level of the supply voltage and elements for stabilization against noise impulses on the supply voltage are provided. The operating point of the output transistor of the current source is regulated in response to sharp drops in the level of the supply voltage thereby obtaining an improved signal-to-noise ratio. The output current of the current source is stabilized with respect to noise by elements of a coupling connected between the base of the output transistor and the supply voltage. By controlling the output current of the current source in dependence upon the rotational speed and/or the amplitude of the output signal of the measuring arrangement, it is possible to obtain an injection-begin signal of constant amplitude over the entire range of the rotational speed, temperature, and fabrication tolerances of the sensors.

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