

Title (en)

METHOD AND DEVICE FOR DETECTING THE MOMENT OF IMPACT OF THE VALVE NEEDLE OF A PIEZO CONTROL VALVE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR DETEKTION DES EINSCHLAGZEITPUNKTES DER VENTILNADEL EINES PIEZO-STEUERVENTILS

Title (fr)

PROCEDE ET DISPOSITIF DE DETECTION DU MOMENT D'IMPACT DU POINTEAU D'UNE SOUPAPE DE COMMANDE PIEZOELECTRIQUE

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Application

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Abstract (en)

[origin: WO03081007A1] The aim of the invention is to be able to detect the moment of impact of the valve needle (48) pertaining to a piezo control valve (22) of a pump-nozzle unit, when the piezo control valve (22) is closed and/or opened. To this end, the piezo voltage (u(t)) and/or piezo current (i(t)) are evaluated. Said evaluation can especially involve the identification of discontinuities and/or pulses during the course of the piezo voltage (u(t)) and/or the piezo current (i(t)). The detected moment of impact can advantageously be put in temporal relation with a known auxiliary variable (SOI, EOI), especially for regulation purposes.

IPC 8 full level

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