Title (en)

IGNITION METHOD AND IGNITION SYSTEM THEREFOR

Title (de

ZÜNDVERFAHREN UND ZÜNDANLAGE DAFÜR

Title (fr)

PROCÉDÉ D'ALLUMAGE ET INSTALLATION D'ALLUMAGE POUR CE PROCÉDÉ

Publication

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Application

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Abstract (en)

[origin: WO2011113431A1] The invention relates to an ignition method for internal combustion engines having an ignition coil (3), which has a primary circuit (P) and a secondary circuit (S), and a spark plug (5) arranged in the secondary circuit (S), wherein the ignition current is a pulse signal, which is controlled by pulse-width modulation in the primary circuit (P), wherein the primary current presently flowing in the primary circuit (P) is measured, the measured primary current is compared with a specified target ignition current, and the pulse-width modulation and/or a frequency modulation of the pulse signal in the primary circuit (P) is adjusted according to the comparison result in order to achieve the target current. The invention further relates to an ignition system for internal combustion engines, comprising a control unit (1) for specifying an activation signal, a combustion duration, and an ignition current, an electronic switch (2) for producing a pulse signal, an ignition coil (3) having a primary winding (31) and a secondary winding (32), wherein the primary winding (31) is connected to a voltage source (4) by means of the electronic switch (2) and the secondary winding (31) supplies a spark plug (5), wherein a first current measuring means (61) is provided in order to determine the primary current flowing through the primary winding (31), downstream of which current measuring means a comparator (8) for comparing the primary current with the target ignition current specified by the control unit (1) is arranged, which comparator has means for acting on the electronic switch (2) for the pulse-width modulation and/or frequency modulation of the primary current and thus of the ignition amperage.

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