

Title (en)  
DEVICE FOR MEASURING THE IONIZATION CURRENT IN A RADIOFREQUENCY IGNITION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)  
VORRICHTUNG ZUM MESSEN DES IONISIERUNGSSTROMS IN EINEM HOCHFREQUENZZÜNDSYSTEM FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)  
DISPOSITIF DE MESURE DU COURANT D'IONISATION DANS UN SYSTEME D'ALLUMAGE RADIOFREQUENCE POUR UN MOTEUR A COMBUSTION INTERNE

Publication  
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Application  
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Priority  
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Abstract (en)  
[origin: WO2010029238A1] The invention relates to a device for the radiofrequency ignition of an internal combustion engine, made up of a power supply circuit (2) comprising a transformer (T) a secondary winding of which is connected to at least one resonator (1) that has a resonant frequency in excess of 1 MHz and comprising two electrodes able to generate a spark to initiate combustion of a combustible mixture in a cylinder of the engine in response to an ignition command, characterized in that it comprises: - a measuring capacitor (CMES) connected in series between the secondary winding and the resonator, - a measurement circuit (40) for measuring a current (IION) at the terminals of the said measuring capacitor, the said current providing an electrical image of how combustion is progressing, - a protection circuit (30) connected between the capacitor and the measurement circuit and designed to spare the said current measurement acquisition time from the electrical effects caused by the ignition command.

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