

Title (en)

An ignition and starting system for a motor-vehicle

Title (de)

Eine Anlass- und Zündanlage für einen Motorfahrzeug

Title (fr)

Système d'allumage et de démarrage pour véhicule à moteur

Publication

EP 1067285 B1 20040818 (EN)

Application

EP 00114487 A 20000706

Priority

IT TO990597 A 19990709

Abstract (en)

[origin: EP1067285A1] The system is intended for a motor-vehicle having an engine to which a magneto-flywheel generator (3) is coupled and which is adapted to be rotated by means of a pedal crank (2). The system (1) comprises: a voltage supply terminal (6) connected to the output of the generator (3, 4) and to a storage battery (5), a dc/dc voltage converter (9) having a supply input (9a) connected to the terminal (6), and an enabling input (9b), a capacitive-discharge ignition circuit (11, 12) the input of which is connected to the output of the voltage converter (9) and the output of which is coupled to a spark plug (SP), a rotation sensor (14) associated with the generator (3), an ignition switch (15) connected to the terminal (6), a regulated direct-current voltage supply circuit (7) the input of which is connected to the supply terminal (6), and an electronic processing and control unit (ECU). The voltage supply circuit (7) and the voltage converter (9) are connected to the supply terminal (6) by means of diodes (8, 10) and respective capacitors (C1, C2) in a manner such that, when the engine is started by means of the pedal crank (2), the energy supplied by the generator (3) is sufficient to enable the voltage supply circuit (7) to supply the regulated voltage for a predetermined minimum period of time and to enable the voltage converter (9) to store sufficient energy for the striking of at least one ignition spark in the engine. The processing and control unit (ECU) is arranged to implement an emergency engine ignition and starting procedure in which it enables the voltage converter (9) to operate in order to charge the ignition capacitor (12) and subsequently to strike a spark to start the engine. <IMAGE>

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