

Title (en)

METHOD FOR IGNITING THE AIR-FUEL MIXTURE IN AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM ZÜNDEN DES LUFT-BRENNSTOFFGEMISCHES IN EINER BRENNKRAFTMASCHINE

Title (fr)

PROCEDE D'ALLUMAGE DU MELANGE AIR-CARBURANT DANS UN MOTEUR A COMBUSTION INTERNE

Publication

EP 1124059 A1 20010816 (EN)

Application

EP 98966931 A 19981112

Priority

RU 9800373 W 19981112

Abstract (en)

A process for the ignition of the fuel-air mixture in an internal combustion engine is described, which includes stages of raising the intensity of the electrical field in the spark plug electrode gap until a spark passes across it, and, repeatedly, the stepped reduction of the electrical field intensity to a set level, maintaining this level of intensity for 2.5-25 μ sec, inverting the direction of the electrical field, and raising the intensity of the electrical field in the spark plug electrode gap until a spark passes across it. Also described is an ignition system using piezo-elements to implement the new process. The invention makes it possible to raise the degree of completeness of the fuel combustion and to improve the economy and ecological characteristics of the engine. <IMAGE>

IPC 1-7

F02P 3/12; **F02P 3/00**

IPC 8 full level

F02P 3/12 (2006.01); **F02P 3/00** (2006.01)

CPC (source: EP KR)

F02P 3/12 (2013.01 - EP KR); **F02P 9/002** (2013.01 - EP)

Citation (search report)

See references of WO 0029745A1

Cited by

DE102009016668A1; DE102009016668B4

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0029745 A1 20000525; AU 2644899 A 20000605; AU 760306 B2 20030515; BR 9816115 A 20010814; CA 2350454 A1 20000525; CN 1322279 A 20011114; EA 003162 B1 20030227; EA 200100488 A1 20011022; EP 1124059 A1 20010816; JP 2002530571 A 20020917; KR 20010109518 A 20011210; MX PA01004858 A 20020918

DOCDB simple family (application)

RU 9800373 W 19981112; AU 2644899 A 19981112; BR 9816115 A 19981112; CA 2350454 A 19981112; CN 98814311 A 19981112; EA 200100488 A 19981112; EP 98966931 A 19981112; JP 2000582710 A 19981112; KR 20017006045 A 20010512; MX PA01004858 A 19981112