

Title (en)
SPARK PLUG AND METHOD

Publication
EP 0386941 A3 19920408 (EN)

Application
EP 90302191 A 19900301

Priority
US 32010789 A 19890306

Abstract (en)
[origin: EP0386941A2] A spark plug with integral electrical components for producing a spark with an increased size and a larger resulting flame kernel in an internal combustion engine. One or more coils may be built into the spark plug for creating a magnetic field in the vicinity of the spark. This magnetic field has the effect of bending and rotating the spark in a circular motion. Also, a capacitor may be incorporated into the spark plug to increase the intensity of the spark. A method of producing such a spark plug utilizes a cermet ink applied to the ceramic spark plug insulator before the insulator is completely hardened. The cermet ink may be used to create monolithic spark plug electrodes, integrated coils and integrated capacitors. The method may also be used to create monolithic electrically conductive paths through any solid dielectric material.

IPC 1-7
H01T 13/40; **H01T 21/02**

IPC 8 full level
F02P 13/00 (2006.01); **H01T 13/40** (2006.01); **H01T 21/02** (2006.01)

CPC (source: EP)
H01T 13/40 (2013.01); **H01T 21/02** (2013.01)

Citation (search report)
• [X] US 4402036 A 19830830 - HENSLEY GEORGE H [US], et al
• [X] GB 2199075 A 19880629 - CUMMINS ENGINE CO INC
• [A] FR 1026595 A 19530429 - CSF
• [A] EP 0225713 A1 19870616 - GEN MOTORS CORP [US]
• [A] US 4161937 A 19790724 - GERRY MARTIN E [US]

Cited by
WO2014067644A1; WO0137288A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0386941 A2 19900912; **EP 0386941 A3 19920408**; **EP 0386941 B1 19960214**; AT E134281 T1 19960215; DE 69025347 D1 19960328; DE 69025347 T2 19960613; JP H02284374 A 19901121

DOCDB simple family (application)
EP 90302191 A 19900301; AT 90302191 T 19900301; DE 69025347 T 19900301; JP 4969290 A 19900302