

Title (en)
MAKE-AND-BREAK SPARK PLUG

Publication
EP 0234345 B1 19891129 (DE)

Application
EP 87101451 A 19870203

Priority
CH 63986 A 19860218

Abstract (en)
[origin: US4850316A] A contact-breaking ignition plug comprises a magnet coil arranged in a housing and surrounding a magnet core. The magnet core comprises an enlarged end portion with lateral surfaces extending conically in relation thereto and also comprises a cavity in which an armature is movably arranged. The armature is mounted on a rod in asymmetrical relation to a longitudinal center plane of the cavity and in transverse relation to the direction of compression pressure propagation. These features induce a concentration of the magnetic effect in the armature region and cause the contact-breaking motion to be augmented by the compression pressure. Respective contact electrodes are exchangeably mounted at each of the free end of the armature and a nose of the housing. The contact electrodes are mounted such that an electrical ignition pulse traversing a short-circuit path extending from the magnet coil of the electromagnet through the contact electrodes induces a magnetic field in the electromagnet, leading to interruption of the short-circuit path and the formation of a spark. The interruption sequence can be accelerated by means of this contact-breaking ignition plug and can be more precisely controlled and material deformations no longer arise during the contact-breaking motions.

IPC 1-7
H01T 13/42

IPC 8 full level
F02P 13/00 (2006.01); **H01T 13/40** (2006.01); **H01T 13/42** (2006.01)

CPC (source: EP KR US)
H01T 13/00 (2013.01 - KR); **H01T 13/42** (2013.01 - EP US)

Cited by
CN101916966A

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

DOCDB simple family (publication)
US 4850316 A 19890725; AT E48341 T1 19891215; CA 1300675 C 19920512; CH 669691 A5 19890331; CN 1003151 B 19890125; CN 87100762 A 19871014; DD 259940 A1 19880907; DE 3761069 D1 19900104; DE 8701819 U1 19870430; EP 0234345 A1 19870902; EP 0234345 B1 19891129; IL 81514 A0 19870916; IN 169207 B 19910914; JP S6324578 A 19880201; KR 870008418 A 19870926

DOCDB simple family (application)
US 1373087 A 19870211; AT 87101451 T 19870203; CA 529112 A 19870205; CH 63986 A 19860218; CN 87100762 A 19870218; DD 29996887 A 19870217; DE 3761069 T 19870203; DE 8701819 U 19870206; EP 87101451 A 19870203; IL 8151487 A 19870209; IN 77MA1987 A 19870205; JP 3545287 A 19870218; KR 870001324 A 19870218