

Title (en)
Gliding discharge spark plug with radial spark

Title (de)
Gleitentladungszündkerze mit radialem Funken

Title (fr)
Bougie à effet de surface à étincelle radiale

Publication
EP 1202411 B1 20030827 (FR)

Application
EP 01402770 A 20011025

Priority
FR 0013821 A 20001027

Abstract (en)
[origin: EP1202411A1] The quotient of the distance separating the central electrode (202) from the counter electrode (212) by the relative permittivity of the insulation is less than the spark length propagating in air along the surface (206). The counter electrode does not have any angles or projections facing the central electrode, it has a radius of curvature (216) greater than a millimeter. Radial surface spark plug which allows progression of a spark, in air, along the surface (206) of an insulator (200) with dielectric coefficient greater than 1. The insulator separates a central electrode (202) from the spark plug body (204) electrically connected to earth. The insulator extends along a direction D. The surface (206) extends perpendicular to the spark plug axis D. A counter electrode extends radially opposite the surface (206), and it has a potential sensibly identical to that of the body (204) so as to generate an amplification of the electrostatic field in air along the surface (206) when a high tension is applied onto the central electrode (202).

IPC 1-7
H01T 13/52

IPC 8 full level
H01T 13/52 (2006.01)

CPC (source: EP)
H01T 13/52 (2013.01)

Cited by
US10900459B2; US2011126789A1; US8671901B2; FR2965984A1; CN103250311A; US9065256B2; LT5490B; WO2012049403A1; US9484717B2

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