

Title (en)

Spark plug for use in an internal-combustion engine

Title (de)

Zündkerze für einen Verbrennungsmotor

Title (fr)

Bougie d'allumage à utiliser dans un moteur à combustion interne

Publication

EP 1837964 A2 20070926 (EN)

Application

EP 07251139 A 20070319

Priority

JP 2006075806 A 20060320

Abstract (en)

A spark plug 100 is comprised of a metal shell 1, an insulator 2, a center electrode 3 and a ground electrode 4. A rear-end face of the ground electrode 4 is welded to a front-end face of the metal shell 1, and a bent portion 5 located at the intermediated position in the longitudinal direction is bent toward the center of the spark plug 100. The ground electrode 4 assumes a circular-shape with a diameter of 2mm or less whereby an inflow of an air-fuel mixture is not disturbed even when the air-fuel mixture directly flows into a back face of the ground electrode 4. The ground electrode 4 is comprised of an outer layer 4A made of a nickel alloy and an inner layer 4B made of pure copper with an excellent thermal conductivity, in which a ratio of a cross-sectional area of the inner layer 4B to the entire cross-sectional area of the ground electrode 4 is 10% or more to 35% or less. Thus, the spark plug 100 which is excellent in heat sinking ability and can prevent a spring back phenomenon due to a difference in a coefficient of thermal expansion.

IPC 8 full level

H01T 13/32 (2006.01); **H01T 13/39** (2006.01)

CPC (source: EP)

H01T 13/32 (2013.01); **H01T 13/39** (2013.01)

Citation (applicant)

US 5210457 A 19930511 - OSHIMA TAKAFUMI [JP], et al

Cited by

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