

Title (en)
ENCAPSULATED, FLAMEPROOF, NOT HERMETICALLY SEALED, ROTATIONALLY SYMMETRICAL HIGH-PERFORMANCE SPARK GAP

Title (de)
GEKAPSELTE, DRUCKFEST AUSGEFÜHRTE, NICHT HERMETISCH DICHT, ROTATIONSSYMMETRISCHE HOCHLEISTUNGSFUNKENSTRECKE

Title (fr)
ECLATEUR A HAUTE PERFORMANCE ENCAPSULE, RESISTANT A LA PRESSION, D'ETANCHEITE NON HERMETIQUE ET A SYMETRIE DE ROTATION

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Abstract (en)
[origin: WO2006128761A1] The invention relates to an encapsulated, flameproof, not hermetically sealed, rotationally symmetrical high-performance spark gap with two main electrodes spaced apart opposite each other, a metal outer housing, at least one trigger electrode, a gas or plasma cooling space, surrounded by the outer housing, and external electrical contacts for the main electrodes, preferably arranged on the end face. According to the invention, the cooling space comprises a coaxial arrangement of an inner cup and an outer cup, one of the main electrodes being formed as a hollow-cylindrical expulsion electrode and reaching into the inner cup. Also provided on the open side of the cup arrangement is a supporting ring, engaging laterally around the expulsion electrode. The supporting ring is connected to the outer cup in a flameproof manner, in particular with nonpositive and/or positive engagement. The outer cup of the coaxial arrangement has lateral gas outlet openings. Provided between the inner and outer cups there is at least one gas cooling duct. Between the outer wall of the outer cup and the inner wall of the outer housing there is a further, gap-like gas cooling duct. The gas cooling ducts themselves follow an altogether meandering path.

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