

Title (en)

METHOD FOR THE PRODUCTION OF ELECTRODES USED FOR HIGH-PERFORMANCE SPARK PLUGS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ELEKTRODEN FÜR HOCHLEISTUNGS-ZÜNDKERZEN

Title (fr)

PROCEDE POUR PRODUIRE DES ELECTRODES POUR DES BOUGIES D'ALLUMAGE HAUTE PUISSANCE

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Application

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Abstract (en)

[origin: WO2004054055A1] The invention relates to a novel method for producing electrodes used for high-performance spark plugs, especially for stationary internal combustion engines, based on an alloy of at least two metals of the platinum group, at least one of which being iridium while at least one other metal is rhodium. The inventive method, in which at least two layers of different metals of the platinum group are joined together, is characterized by the fact that said layers are bonded to each other across the entire surface thereof without leaving any gap at a temperature of 400 to 1500 DEG C so as to form a planar welded or soldered bond, at least one of the layers being formed by an alloy containing rhodium and at least one additional platinum metal, whereupon the bonded layers are fused to and into each other by means of laser radiation or electron radiation while a given geometrical shape, especially a strip shape, is maintained so as to obtain a compact fused alloy body having a total rhodium content of 2.2 to 2.8 mass percent. The invention also relates to a method for producing the electrodes and the use of rhodium alloy for said production.

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