

Title (en)

WIRE ELECTRODE FOR SPARK-EROSION CUTTING AND METHOD FOR PRODUCING SAID WIRE ELECTRODE

Title (de)

DRAHTELEKTRODE ZUM FUNKENEROSIVEN SCHNEIDEN UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

FIL-ÉLECTRODE POUR DÉCOUPAGE PAR ÉLECTRO-ÉROSION ET PROCÉDÉ POUR LA FABRICATION DUDIT FIL-ÉLECTRODE

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Application

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Abstract (en)

[origin: WO2020229365A1] The invention relates to a wire electrode for spark-erosion cutting, comprising a core (2), which has a metal or a metal alloy, and a sheath (3, 4, 6), which surrounds the core (2) and comprises one or more sheath layers (3, 4, 6), one of which comprises regions (3) having a morphology corresponding to block-like particles, which are spatially separated, at least over part of their periphery, from one another, from the material of the layer comprising said regions, from the material of one or more other layers and/or from the core material by cracks, characterized in that, in a wire cross-section, viewed perpendicularly or parallel to the wire longitudinal axis, more than 50% of the surface area of a region having the morphology of a block-like particle has a copper-zinc alloy with a zinc concentration of 38 to 49 wt.%. There is optionally a thin cover layer on the block-like particles, which cover layer consists of more than 50 wt.% zinc oxide with a thickness of 0.05 to 2 µm. Said cover layer has regions in which the copper-zinc alloys that the block-like particles have emerge at the surface. The invention also relates to a method for producing said wire electrode.

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