

## Title (en)

Methods for manufacturing a stud of an electric contact and an electric contact

## Title (de)

Herstellungsverfahren eines Kontaktplättchens eines elektrischen Kontakts und eines elektrischen Kontakts

## Title (fr)

Procédés de fabrication d'un plot de contact électrique et d'un contact électrique

## Publication

**EP 2337044 A1 20110622 (FR)**

## Application

**EP 09179852 A 20091218**

## Priority

EP 09179852 A 20091218

## Abstract (en)

The method of producing an electrical contact pad comprising a support pad and a contact layer, comprises depositing a first powder (1) on the support pad to form the contact layer by cold gas dynamic spraying. The first powder containing particles comprises grains (10-40 vol.%) of a refractory material embedded in a matrix based on the conductive metal including silver or copper, pure metal particles corresponding to the conductive metal matrix, and particles comprising grains of a doping agent embedded in a metal matrix, which corresponds to the metal conductive metal matrix. The method of producing an electrical contact pad comprising a support pad and a contact layer, comprises depositing a first powder (1) on the support pad to form the contact layer by cold gas dynamic spraying. The first powder containing particles comprises grains (10-40 vol.%) of a refractory material embedded in a matrix based on the conductive metal including silver or copper, pure metal particles corresponding to the conductive metal matrix, and particles comprising grains of a doping agent embedded in a metal matrix, which corresponds to the metal conductive metal matrix. The doping agent is embedded with grains of refractory material in their matrix of conductive metal. The particles comprising grains of refractory material are obtained by the process including physical vapor deposition, chemical vapor deposition and electroless process, and by chemical precipitation on particles in suspension. The contact support is present in the form of pre-cut individual pieces. Independent claims are included for: (1) a method for producing an electrical contact comprising a contact support and a pad; (2) an electrical contact; and (3) an electrical contact pad.

## Abstract (fr)

La présente invention concerne un procédé de fabrication d'un plot de contact électrique comprenant un support de plot et au moins une couche de contact, ainsi qu'un procédé de fabrication d'un contact électrique comprenant un support de contact et au moins une couche de contact. Lesdits procédés comprennent une étape de dépôt, par projection dynamique par gaz froid, d'une première poudre sur ledit support de plot ou de contact pour former ladite couche de contact, ladite première poudre contenant au moins des particules comprenant des grains d'au moins un matériau réfractaire incorporés dans une matrice à base de métal conducteur choisi parmi l'argent ou le cuivre. L'invention concerne également les plots et les contacts électriques obtenus par lesdits procédés de fabrication respectifs.

## IPC 8 full level

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## Citation (applicant)

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## DOCDB simple family (application)

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