

Title (en)

METHOD FOR DEPOSITING CARBIDE COATINGS OF HIGH-FUSION METALS

Title (de)

VERFAHREN ZUM ABSCHIEDEN VON KARBIDSCHICHTEN HOCHSCHMELZENDER METALLE

Title (fr)

PROCEDE POUR DEPOSER DES COUCHES DE CARBURE DE METAUX A POINT DE FUSION ELEVE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2005109466A1] The invention relates to a method for depositing layers of carbide of at least one high-fusion metal (3) on at least one object (8) using high-speed electron beam evaporation in a vacuum chamber (1). According to the invention: an atmosphere that contains carbon is created in said vacuum chamber (1) by the influx of a reactive gas; the high-fusion metal (3) is evaporated using an electron beam (5); the deposition is supported by a plasma, the latter being generated on the surface of the high-fusion metal (3) that is to be evaporated by means of a diffuse arc discharge; and the coating rate is at least 20 nm/s and the object temperature is maintained at between 50 DEG C and 500 DEG C during the deposition process.

IPC 8 full level

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