Title (en)
METHOD FOR PRODUCING A LAYER BY MEANS OF COLD SPRAYING AND USE OF SUCH A LAYER

Title (de)
VERFAHREN ZUM HERSTELLEN EINER SCHICHT MITTELS KALTGASSPRITZEN UND VERWENDUNG EINER SOLCHEN SCHICHT

Title (fr)
PROCÉDÉ DE RÉALISATION D'UNE COUCHE PAR INJECTION DE GAZ FROID ET UTILISATION D'UNE TELLE COUCHE

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Application
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Abstract (en)
[origin: WO2011151313A1] The invention relates to a method for generating an abrasive wear-resistant layer (13) on a substrate (11). According to the invention, said layer (13) consists of particles (14) of a ductile material, in particular Zn, wherein the parameters of the cold spraying process are set such that a comparatively loose laminate having pores (15) is formed by the spray particles (14). Said laminate advantageously and surprisingly exhibits high resistance to abrasive wear (for example by a particle (16)) because the layer (13) can avoid the attack by the particle (16) by plastic deformation and closure of the pores (15), whereby abrasive removal of the layer is advantageously low. The invention further relates to a use of a cold gas-sprayed layer as a protective layer against abrasive wear.

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Citation (examination)
D HELFRITCH ET AL: "A Model Study of Powder Particle Size Effects in Cold Spray Deposition", 1 December 2008 (2008-12-01), XP055579986, Retrieved from the Internet <URL:https://pdfs.semanticscholar.org/8a89/5ecf63333374a21d8cf6cd802904da307a5f.pdf>

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