

Title (en)
METHOD FOR PRODUCING PROTECTIVE LAYERS CONTAINING SILICIDES AND/OR OXIDIZED SILICIDES ON SUBSTRATES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON SCHUTZSCHICHTEN MIT SILICIDEN UND/ODER OXIDIERTEN SILICIDEN AUF SUBSTRATEN

Title (fr)
PROCÉDÉ DE PRÉPARATION DE COUCHES PROTECTRICES AVEC DES SILICIURES ET/OU DES SILICIURES OXYDÉS SUR DES SUBSTRATS

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Application
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Abstract (en)
[origin: WO2014019571A1] The invention relates to a method for producing protective layers containing silicides and/or oxidized silicides on a substrate, in which silicide or a precursor thereof is applied to the substrate and the coated substrate is subjected to a temperature treatment above 250°C without further processing. The layers obtained have a thickness in the nano-range and can simultaneously have various characteristic features, i.e. they are multifunctional. The following characteristic features were found for these nano-layers: scratch resistance, abrasion resistance, corrosion resistance and temperature resistance up to 1500°C, depending in each case on the substrate and the silicide(oxide) used for the coating.

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