

Title (en)

PROCESS FOR TREATING THE SURFACES OF STEELS AGAINST WEAR, AND COATING OBTAINED

Publication

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Application

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Priority

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Abstract (en)

[origin: US4435227A] An object of the present invention is a method for the anti-wear treatment of the surface of steel parts having a carbon content of at least 0.15% and the coating obtained thereby. The method is characterized by the fact that an addition of sulfur, by depositing of a metal sulfide for example, and a vapor-phase chromizing are carried out in succession on the surface to be treated. The coating obtained is characterized by the presence of a layer of chromium sulfide on the surface and by the partial recrystallization of the underlying M7C3 chromium carbide layer. The invention can be applied to any moving mechanical system which is subject to abrasion. The invention has importance because it increases the resistance to wear and the life of the system treated while limiting the wear of the untreated opposing part as a result of friction.

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