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[54] **METHOD FOR PROTECTING PRODUCTS MADE OF A REFRACTORY MATERIAL AGAINST OXIDATION, AND RESULTING PROTECTED PRODUCTS**

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[58] **Field of Search** 428/408, 698, 428/446, 457, 469, 472, 677, 658, 701, 702, 704; 156/89; 427/228, 397.7

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[57] **ABSTRACT**

A coating for providing anti-oxidation protection is formed at least on the surface of the material and it comprises a refractory phase which is formed mainly of the refractory silicide $Ti_{(0.4-0.95)}Mo_{(0.6-0.05)}Si_2$, and which has a branching microstructure forming an armature within which a healing phase is distributed that is constituted by a eutectic which is formed mainly of unbound silicon, of the silicide $Ti_{(0.4-0.95)}Mo_{(0.6-0.05)}Si_2$, and of at least the disilicide TiS_2. The coating is obtained from a mixture of powders that is deposited on the surface of the material and that is subjected to heat treatment under an inert atmosphere.

27 Claims, No Drawings