

Title (en)
EROSION-RESISTANT COATINGS FOR ORGANIC MATRIX COMPOSITES

Title (de)
EROSIONSBESTÄNDIGE BESCHICHTUNGEN FÜR ORGANISCHE MATRIXKOMPOSITE

Title (fr)
REKETEMENTS RESISTANT A L'EROSION POUR COMPOSITES A MATRICE ORGANIQUE

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Application
EP 00992985 A 20001024

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Abstract (en)
[origin: WO0146324A2] This invention is directed to a coated article having an erosion-resistant coating and a method of providing the erosion-resistant coating to the article. The coated article has an increased useful lifespan and will resist erosion even in high-temperature environments. The coated article includes an organic resin substrate, a high-temperature erosion-resistant coating, and a bonding layer to secure the coating to the substrate. The bond coating can comprise a material selected from zinc, aluminum, aluminum-silicon alloy, chromium, titanium, nickel, silicon, tin, antimony, copper, iron, stainless steel, silver, and mixtures thereof. The erosion-resistant coating can be provided as a substantially non-porous layer comprising a material selected from the group of carbides, fluorides, nitrides, oxides and mixtures thereof of materials such as nickel, cobalt, iron, chromium, tungsten, and molybdenum. The organic resin substrate is prepared to receive the erosion-resistant coating by grip-blasting the resin surface. The metallic bond coat is then applied to the resin surface, and an erosion-resistant coating is deposited on the metallic bond coating.

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