

Title (en)
METAL SURFACES COATED WITH FLUORINATED POLYMERS

Title (de)
MIT FLUORPOLYMEREN BESCHICHTETE METALLOBERFLÄCHEN

Title (fr)
SURFACES METALLIQUES REVETUES DE POLYMERES FLUORES

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Abstract (en)
[origin: US6773815B2] The present invention relates to a coated metal surface comprising, successively: a layer (1) of epoxy primer placed next to the metal, a layer (2) of binder comprising 98 to 50 parts by weight of at least one fluoropolymer L3 per 2 to 50 parts, respectively, of at least one polymer chosen from acrylic polymers L1 and polymers L2 which are fluoropolymers chemically modified by a partial dehydrofluorination followed by an oxidation, a layer (3) of fluoropolymer. According to a first variant, the coating does not comprise the layer (3). However, it is recommended that the layer (2) which becomes the outer layer should be thicker than in the structure of the main invention. According to a second variant, the coating does not comprise the layer of primer (1), the layer of binder necessarily contains the polymer L2 and the surface is necessarily the outer surface of tubes. According to a third variant, the coating does not comprise the layer (2) and the layer (1) comprises a mixture of epoxy primer and polymer L2. The invention relates more particularly to the coating of the outer surface of tubes. These tubes are useful for the development of offshore hot oil wells, since it is necessary for the tubes which transport the hot oil to withstand corrosion by seawater.

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