

Title (en)  
PROCESS AND PRODUCT FOR THE PASSIVATION OF IRON AND STEEL SURFACES.

Title (de)  
VERFAHREN UND MITTEL ZUM PASSIVIEREN VON EISEN-UND STAHL OBERFLÄCHEN.

Title (fr)  
PROCEDE ET PRODUIT POUR PASSIVER LES SURFACES EN FER ET EN ACIER.

Publication  
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Application  
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Abstract (en)  
[origin: WO8200665A1] Metal surfaces are treated with 0,5 to 5% by weight of aqueous solutions (pH 7.5 to 10.5) containing a combination of anticorrosive substances giving a clear aqueous solution. This combination includes: a) one or several alkylamides of n-monomaleic or isomaleic acid with 6 to 14, preferably 8 to 10 carbon atoms. b) one or several alkanolamines, preferably mono-, di and/or triethanolamine and c) complexing phosphonic oxides, preferably 1-hydroxy-alkyl-1, 1-diphosphonic oxyde, 1-aminoalkyl-1 acid, 1-diphosphonic, phosphonocarbonic acid and/or a phosphonic acid having the formula: (FORMULA) Preferred phosphonic acids are 1-hydroxyethane-1, 1-diphosphonic, 2-phosphonobutane-1,2,4-tricarboxylic and/or nitrilotrimethylenephosphonic acid. The ratio a:b in the solutions has to be from 1:0,3 to 1:10, the ratio a:c has to be from 1:0.01 to 1:0,5. The solutions may further contain surfactants, preferably phosphates and/or borates. These solutions provide a better protection against corrosion than that obtained with the means used heretofore.

Abstract (fr)  
On traite les surfaces metalliques avec des solutions aqueuses a 0,5 a 5% en poids (pH 7,5 a 10,5) renfermant une combinaison de substances anticorrosives donnant une solution aqueuse limpide. Cette combinaison se compose de: a) un ou plusieurs alkylamides de l'acide n - monomaleique ou isomaleique avec 6 a 14, de preference 8 a 10 atomes de carbone, b) un ou plusieurs alkanolamines, de preference la mono-, di et/ou triethanolamine et c) des oxydes phosphoniques complexants, de preference l'oxide 1-hydroxy-alkyl-1,1-diphosphonique, l'acide 1-aminoalkyl-1,1-diphosphonique, l'acide phosphonocarbonique et/ou un acide phosphonique de formule: (FORMULE) Des acides phosphoniques preferes sont l'acide 1-hydroxyethane-1,1-diphosphonique, l'acide 2-phosphonbutane-1,2,4-tricarboxique et/ou l'acide nitrilotrimethylenephosphonique. Le rapport de a:b dans les solutions doit etre de 1:0,3 a 1:10, celui de a:c de 1:0,01 a 1:0,5. Les solutions peuvent, en outre, renfermer des agents tensio-actifs, de preference des phosphates et/ou des borates. Ces solutions permettent d'obtenir une meilleure protection contre la corrosion que celle obtenue avec les moyens employes jusqu'a present.

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