

Title (en)

AN ECONOMIC METHOD FOR RESTORING THE OXIDATION POTENTIAL OF A PICKLING SOLUTION

Title (de)

WIRTSCHAFTLICHES VERFAHREN ZUR WIEDERHERSTELLUNG DES OXIDATIONSPOTENTIALS EINER BEIZLÖSUNG

Title (fr)

PROCEDE ECONOMIQUE DE RETABLISSEMENT DU POTENTIEL D'OXYDATION D'UNE SOLUTION DE DECAPAGE

Publication

EP 1552038 A1 20050713 (EN)

Application

EP 02807707 A 20020830

Priority

EP 0209730 W 20020830

Abstract (en)

[origin: WO2004020700A1] A process for pickling and/or passivating stainless steel, wherein the stainless steel is brought into contact with an aqueous treatment solution with a pH value of 2.5 or below, which contains Fe(III) ions which are reduced to Fe(II) ions during pickling, wherein Fe(II) ions are re-oxidized continuously or discontinuously by the injection or oxygen gas or of a gas mixture containing more than 10 % by volume of oxygen gas, and wherein a non-gaseous oxidizing agent is additionally added to said aqueous treatment solution as long as either the actual Fe(III) concentration is by more than 3 g/l lower than the optimum Fe(III) concentration, or when the actual Fe(III)/Fe(II) weight ratio is by more than 0.15 lower than the optimum Fe(III)/Fe(II) weight ratio, and the addition of the non-gaseous oxidizing agent is terminated when either the actual Fe(III) concentration is equal to or higher than the optimum Fe(III) concentration, or when the actual Fe(III)/Fe(II) weight ratio is equal to or higher than the optimum Fe(III)/Fe(II) weight ratio.

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CPC (source: EP)

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