

Title (en)

SUCCESSIVE CORROSION-PROTECTING PRE-TREATMENT OF METAL SURFACES IN A MULTI-STEP PROCESS

Title (de)

SUKZESSIVE KORROSIONSSCHÜTZENDE VORBEHANDLUNG VON METALLOBERFLÄCHEN IN EINEM MEHRSTUFENPROZESS

Title (fr)

PRÉTRAITEMENT PROGRESSIF ANTICORROSION DE SURFACES MÉTALLIQUES DANS UN PROCÉDÉ EN PLUSIEURS ÉTAPES

Publication

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Application

EP 09781448 A 20090804

Priority

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Abstract (en)

[origin: WO2010018102A1] The present invention relates to a method for optimizing the corrosion-protecting pre-treatment of metal surfaces and using rinse water in a manner to conserve resources in such a corrosion-protecting pre-treatment, comprising a conversion treatment step using an aqueous composition comprising at least 50 ppm of the elements B, Si, Ti, Zr and/or Hf in the form of water-soluble compounds at a pH of 3 to 5.5, wherein a minimum fraction of 10 ppm of the elements B, Si, Ti, Zr and/or Hf in the form of water-soluble compounds is present in the last pre-rinse step and a portion of the aqueous composition of the conversion treatment step is contained in the first post-rinse step. The resource-conserving use of the rinse water is accomplished according to the invention by way of a cascaded return of rinse water from the last rinse step to the first rinse step. The present invention also relates to a metallic component treated using the method according to the invention and to the use thereof in a process for applying a multi-coating system, in particular a paint system containing an organic binder, in industrial manufacturing.

IPC 8 full level

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Citation (search report)

See references of WO 2010018102A1

Cited by

US10400337B2; US10125424B2; US10920324B2; EP4112773A1; WO2023275270A2

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