

Title (en)

Method of producing zinc-chromium alloy plated steel sheet with excellent plating adhesiveness

Title (de)

Verfahren zur Herstellung von mit einer Zink-Chromlegierung galvanisierten Stahlblechen mit hervorragender Haftfestigkeit

Title (fr)

Procédé de production d'une feuille d'acier recouverte d'un alliage zinc-chrome d'une excellente adhérence

Publication

EP 0566121 B1 19970702 (EN)

Application

EP 93106155 A 19930415

Priority

JP 9633192 A 19920416

Abstract (en)

[origin: EP0566121A1] The present invention provides a method of producing a zinc-chromium alloy-plated steel sheet having excellent properties such as bare corrosion resistance, corrosion resistance after coating, plating adhesiveness and weldability. The method is characterized by plating the surface of the steel sheet using an acid plating bath containing zinc ion (Zn^{2+}) and chromium ion (Cr^{3+}) at a molar concentration ratio of about 0.1 $\leq Cr^{3+}/(Zn^{2+} + Cr^{3+}) \leq 0.9$ in a total amount of at least about 0.5 mol/l within the dissolution range, and about 0.1 to 30 g/l of at least one nonionic organic additive having at least a triple bond, at a bath temperature of about 25 to 70 DEG C and a pH of about 1.0 to 4.0 with a current density of about 50 to 200 A/dm².

IPC 1-7

C25D 3/56

IPC 8 full level

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CPC (source: EP KR)

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Cited by

DE102009045074A1; DE102009045076A1; DE102009045076A9; WO2008014885A1; EP0638668A1; US5458764A; CN103225093A; DE102006035660B4; DE102006035660A1; DE102006035660A9; WO2011036306A2

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