

Title (en)

Production of conversion coatings on zinc or zinc alloy surfaces.

Title (de)

Erzeugung von Konversionsüberzügen auf Zink- oder Zinklegierungsoberflächen.

Title (fr)

Obtention de couches de conversion sur des surfaces en zinc ou en alliage de zinc.

Publication

EP 0459549 B1 19940817 (DE)

Application

EP 91201020 A 19910429

Priority

DE 4017186 A 19900529

Abstract (en)

[origin: EP0459549A1] In a process for producing conversion coatings on zinc or zinc alloy surfaces, in which the surfaces are contacted in a first stage with a solution which contains at least two different polyvalent metal ions and such a quantity of complexing agent that the polyvalent metal ions are held in solution, and has a pH of ≥ 11 , rinsing is carried out in a subsequent stage with a rinsing solution which contains aluminium, zirconium and fluoride and has been adjusted to a pH of ≤ 5 . In preferred embodiments of the process, the total concentration of the Al + Zr + F is adjusted to a value between 0.1 and 8.0 g/l, preferably between 0.2 and 5.0 g/l, and the Al:Zr:F molar ratio is adjusted to (0.15 to 8.0):1:(5 to 52) or to (0.15 to 0.67):1:(5 to 7). The treatment duration and treatment temperature are advantageously 1 to 120 seconds, preferably 1 to 30 seconds, and 20 to 80 DEG C, preferably 20 to 50 DEG C, respectively. The process can be used with advantage as a pretreatment for subsequent coating, foil coating or adhesive coating.

IPC 1-7

C23C 22/60; **C23C 22/83**

IPC 8 full level

C23C 22/50 (2006.01); **C23C 22/60** (2006.01); **C23C 22/83** (2006.01); **C23G 1/10** (2006.01)

CPC (source: EP)

C23C 22/34 (2013.01); **C23C 22/60** (2013.01); **C23C 22/73** (2013.01); **C23C 22/83** (2013.01)

Citation (examination)

EP 0410497 A1 19910130 - METALLGESELLSCHAFT AG [DE], et al

Cited by

EP2673394A4; EP2458032A1; ITMI20102198A1; US6346295B1; WO2012109339A2; WO9907917A1

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