

Title (en)

Process for treating the surface of zinc coated alloyed sheet steel and sheet obtained thereby

Title (de)

Verfahren zur Oberflächenbehandlung von verzinktem Stahlblechlegierung und so hergestelltes Blech

Title (fr)

Procédé de traitement de surface de tôles d'acier galvanisé allié et tôle obtenue.

Publication

EP 0890655 A1 19990113 (FR)

Application

EP 98401646 A 19980702

Priority

FR 9708769 A 19970710

Abstract (en)

A surface treatment process for hot dip zinc-iron alloy coated steel sheets comprises applying a chromium (alloy) thin film of NOTGREATER 1 μm thickness onto the alloy coating and then cold working under conditions which maintain an arithmetic mean surface roughness (Ra) of greater than 0.2 μm . Preferably, the thin film is applied by vacuum deposition and the work hardening operation produces 0.5-4% elongation. Also claimed is a method of resistance welding a hot dip zinc-iron alloy coated steel sheet in which, prior to the actual welding operation, the sheet is surface treated as described above. Further claimed is an alloy-galvanised steel sheet which has the chromium (alloy) thin film by the above surface treatment process. The film is discontinuous and distributed in the valleys of the sheet surface roughness.

Abstract (fr)

Procédé dans lequel : on applique un film mince de chrome ou d'alliage à base de chrome d'épaisseur au plus égale à 1 μm sur la tôle, puis on effectue sur la tôle une opération d'écrouissage dans des conditions adaptées pour maintenir la rugosité moyenne arithmétique de la surface à une valeur Ra > 0,2 μm . On obtient une tôle présentant à la fois une excellente soudabilité par résistance et une excellente aptitude à la mise en peinture par électrophorèse.

IPC 1-7

C23C 2/26; **C23C 28/02**

IPC 8 full level

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CPC (source: EP US)

C23C 2/26 (2013.01 - EP US); **C23C 28/021** (2013.01 - EP); **C23C 28/023** (2013.01 - EP); **C23C 28/025** (2013.01 - EP)

Citation (search report)

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