

Title (en)

Method for producing tin-free steel strips having improved lacquer adhesion.

Title (de)

Verfahren zur Herstellung zinnfreier Stahlbänder mit verbessertem Haftvermögen für Lacke.

Title (fr)

Procédé pour la production de bandes en acier exemptes d'étain ayant une adhésion améliorée pour laques.

Publication

**EP 0132722 A1 19850213 (EN)**

Application

**EP 84108249 A 19840713**

Priority

JP 13207183 A 19830720

Abstract (en)

Tin-free steel sheets are produced by chromium plating a thin steel sheet through cathodic electrolysis in a chromium-containing bath to deposit a metallic chromium layer, reversely electrolyzing the chromium plated steel sheet by a successive anodizing treatment in the same or another chromium-containing bath, and subjecting the reversely electrolyzed steel sheet to an electrolytic chromate treatment in an aqueous chromate solution. The adhesion of lacquer to the TFS sheet is improved by carrying out the electrolytic chromate treatment in a chromate solution which contains chromic acid, chromates or dichromates as a main ingredient, and sulfuric acid, sulfates, thiocyanates, sulfonic acids or sulfonates as an assistant ingredient, in a molar ration of H<sub>2</sub>SO<sub>4</sub>/CrO<sub>3</sub> between 1/1000 and 1/100 provided that the main and assistant ingredients are converted into CrO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub>, respectively.

IPC 1-7

**C25D 11/38**; **C25D 3/04**; **C25D 11/26**; **C25D 7/06**

IPC 8 full level

**C25D 11/38** (2006.01)

CPC (source: EP)

**C25D 11/38** (2013.01)

Citation (search report)

- US 3986940 A 19761019 - TAKANO HIROSHI, et al
- US 3679554 A 19720725 - YAMAGISHI HIDEHISA, et al
- PATENT ABSTRACTS OF JAPAN, unexamined applications, C field, vol. 7, no. 22, January 28, 1983 THE PATENT OFFICE JAPANESE GOVERNMENT page 55 C 148 & JP-A-57-177 998 (kawasaki seitetsu k.k.)
- PATENT ABSTRACTS OF JAPAN, unexamined applications, C field, vol. 4, no. 61, May 8, 1980 THE PATENT OFFICE JAPANESE GOVERNMENT page 50 c 9 & JP-A-55-28 309 (shin nippon seitetsu k.k.)
- PATENT ABSTRACTS OF JAPAN, unexamined applications, C field, vol. 4, no. 98, July 15, 1980 THE PATENT OFFICE JAPANESE GOVERNMENT page 13 C 18 & JP-A-55-58 395 (kawasaki seitetsu k.k.)

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