

Title (en)

PROCESS FOR PRODUCING A MULTILAYER-COATED STRIP HAVING EXCELLENT CORROSION RESISTANCE AND WELDABILITY AND USEFUL FOR CONTAINERS

Publication

EP 0260374 A3 19890906 (EN)

Application

EP 87104231 A 19870323

Priority

JP 22052186 A 19860918

Abstract (en)

[origin: EP0260374A2] A multilayer-coated steel strip having an excellent corrosion resistance and weldability and useful for cans and containers is produced by a process in which a steel strip substrate is plated with nickel or a nickel-based alloy to form nickel based coating layers each having an average amount of 2 to 10 mg/m², provided with a number of convex and concave portions thereof, portions of which layers having a coating thickness of 0.001 μm or more have a total area corresponding to 10 to 90% of the entire area of the surfaces of the substrate; the nickel based plated substrate is coated with tin to form tin coating layers on the nickel-based coating layers, each of which tin coating layers has an average amount of 200 to 2000 mg/m²; the resultant precursory coated steel strip is heated at a temperature equal to or higher than the melting point of tin to convert the nickel-based coating layers and the tin coating layers to base coating layers consisting essentially of an Fe-Ni-Sn-based alloy and having a number of convex and concave portions thereof, and intermediate coating layers formed on the base coating layers, consisting essentially of tin and having a number of convex and concave portions thereof; and then an electrolytic chromate treatment is applied onto the intermediate tin coating layers to form surface coating layers consisting of electrolysed chromate.

IPC 1-7

C25D 5/12; C25D 11/38

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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CA 1331962 C 19940913; DE 3788178 D1 19931223; DE 3788178 T2 19940310; JP H0214438 B2 19900409; JP S6376896 A 19880407

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