

Title (en)

SURFACE TREATMENT METHOD OF GALVANIZED STEEL SHEET PRODUCT AND GALVANIZED STEEL SHEET PRODUCT TREATED BY THE SAME

Title (de)

OBERFLÄCHENBEHANDLUNGSVERFAHREN FÜR EIN GALVANISIERTES STAHLBLECHPRODUKT UND DAMIT BEHANDELTES GALVANISIERTES STAHLBLECHPRODUKT

Title (fr)

PROCÉDÉ DE TRAITEMENT DE SURFACE D'UN PRODUIT EN TÔLE D'ACIER GALVANISÉ ET PRODUIT EN TÔLE D'ACIER GALVANISÉ TRAITÉ PAR CELUI-CI

Publication

**EP 4353877 A2 20240417 (EN)**

Application

**EP 23203146 A 20231012**

Priority

- KR 20220131777 A 20221013
- KR 20220144109 A 20221102

Abstract (en)

There is disclosed a surface treatment method of a steel sheet formed product including a first step of preparing a galvanized steel sheet formed product; a second step of performing surface-modification treatment for a galvanized layer of the prepared steel sheet formed product; a third step of coating a resin on the surface-modification-treated galvanized layer; and a fourth step of bringing the resin coating layer into close contact on the galvanized layer. The second step may include a process of increasing a surface roughness by electrolytically etching the galvanized steel sheet formed product in a surface treatment composition solution. The surface treatment composition may be an eco-friendly baking soda solution, and the baking soda solution may be prepared by dissolving 10wt% to 50wt% of baking soda in water. The electrolytic corrosion may be performed by using the galvanized steel sheet formed product as an anode and lead or copper as a cathode, and the electrolytic corrosion may be performed by a voltage of 10V to 36V DC at a temperature of 60°C to 85°C. The third step may perform a process of re-coating a resin by general coating once or twice or more on the base steel sheet coated with a resin by a first electrodeposition coating.

IPC 8 full level

**C25F 3/06** (2006.01); **C23C 18/08** (2006.01); **C25D 9/02** (2006.01)

CPC (source: EP)

**C23C 22/34** (2013.01); **C25D 13/04** (2013.01); **C25D 13/20** (2013.01); **C25D 13/22** (2013.01); **C25F 3/06** (2013.01); **B05D 1/007** (2013.01);  
**B05D 1/18** (2013.01); **B05D 3/0254** (2013.01); **B05D 7/142** (2013.01); **B05D 2202/10** (2013.01); **B05D 2350/65** (2013.01)

Citation (applicant)

- KR 20220131777 A 20220929 - YOON HYO SUK [KR]
- KR 20220144109 A 20221026 - KANGNAM JEVISCO CO LTD [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4353877 A2 20240417**

DOCDB simple family (application)

**EP 23203146 A 20231012**