

Title (en)

PROCESS AND HAND-OPERATED INSTRUMENT FOR THE SEMI-MECHANICAL ZINC PLATING OF SHEET SURFACES

Publication

EP 0193706 B1 19890614 (DE)

Application

EP 86100333 A 19860113

Priority

DE 3507927 A 19850306

Abstract (en)

[origin: US4879015A] A method and manual apparatus for the semimechanical galvanizing of sheet metal surfaces according to an absorbent covering, which serves for the post-galvanizing of body sheet metal panels within the area of a damage of the zinc layer. According to this method, the surface of the panel is electrocleaned within the area of the damage with an aqueous alkaline solution by an automatic to and fro movement by means of an absorbent covering secured at the hand apparatus. Thereafter, a zinc electrolyte on an alkaline basis is applied by the movement of the hand apparatus by means of a further absorbent covering connected with the hand apparatus with a current of about 10 to 15 A and a voltage of 11 to 13 V and a zinc layer with a thickness of 8 to 12 μm is produced. An apparatus is provided for the semimechanical galvanizing of sheet metal surfaces, which includes a treatment element forming an anode and including cover elements covering the surface of the treatment element for a zinc electrolyte or a cleaning solution. A tool element is operatively connected to the treatment element and a handle element is connected with the tool element for displacing the treatment element on a surface of a standing-still workpiece as a unit. The tool element automatically carries out relative movements of the treatment element with respect to the standing-still workpiece and the tool element.

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CPC (source: EP US)

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Citation (examination)

METALS HANDBOOK, 9th Edition, Vol. 5, Surface cleaning, finishing and coating: pp. 292-298 (Selective Plating), pp. 246-247 (Zinc Plating) and p. 28 (Electrocleaning)

Cited by

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