

Title (en)  
Method for producing a sheet metal part with a corrosion-resistant coating

Title (de)  
Verfahren zum Herstellen eines Blechformteils mit einer Korrosionsschutzbeschichtung

Title (fr)  
Procédé destinés à fabriquer une pièce usinée en tôle dotée d'un revêtement de protection contre la corrosion

Publication  
**EP 2327805 B1 20160413 (DE)**

Application  
**EP 10180536 A 20100928**

Priority  
DE 102009053368 A 20091114

Abstract (en)  
[origin: EP2327805A1] The method for producing a sheet metal part provided with a corrosion resistant coating and formed from a high-strength steel sheet material, comprises forming a provided initial sheet metal material to the sheet metal part, electrolytically coating the sheet metal part for the formation of the corrosion resistant coating, and subsequently heat treating the coated sheet metal part. The initial sheet metal material is a high strength steel sheet material. The electrolytic coating is a zinc-containing corrosion resistant coating applied on the sheet metal part. The method for producing a sheet metal part provided with a corrosion resistant coating and formed from a high-strength steel sheet material, comprises forming a provided initial sheet metal material to the sheet metal part, electrolytically coating the sheet metal part for the formation of the corrosion resistant coating, and subsequently heat treating the coated sheet metal part. The initial sheet metal material is a high strength steel sheet material. The electrolytic coating of a zinc-containing corrosion resistant coating is applied on the sheet metal part. The layer thickness of the electrolytically applied corrosion resistant coating is less than 15  $\mu\text{m}$ . The temperature of the heat treatment is 180-200[deg] C. The duration of the heat treatment is several hours and is carried out in a protective gas atmosphere. The forming is a hot-forming. After the forming and before electrolytic coating, the hardening of the sheet metal part is carried out. The forming includes a press hardening. Independent claims are included for (1) a production plant for producing a sheet metal part; and (2) a hot-formed part.

IPC 8 full level  
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Cited by  
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