

Title (en)
METHOD FOR PRODUCING SUCH A COMPONENT MADE OF PRESS-FORM-HARDENED, ALUMINUM-BASED COATED STEEL SHEET

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES BAUTEILS AUS PRESSFORMGEHÄRTETEM, AUF BASIS VON ALUMINIUM BESCHICHTETEM STAHLBLECH

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PIÈCE CONSTITUÉE DE TÔLE D'ACIER REVÊTUE À BASE D'ALUMINIUM DURCIE PAR MOULAGE PAR COMPRESSION

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Application
EP 17721056 A 20170413

Priority
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Abstract (en)
[origin: WO2017182382A1] The invention relates to a component made of press-form-hardened, aluminium-based coated steel sheet, the coating having a covering which contains aluminum and silicon applied in the hot-dip process, characterized in that the press-form-hardened component in the transition region between steel sheet and covering has an inter-diffusion zone I, wherein, depending on the layer application of the covering before heating and press hardening, the thickness of the inter-diffusion zone I obeys the following formula: $I [\mu\text{m}] < (1/35) \times \text{application on both sides [g/m}^2] + (19/7)$, on the inter-diffusion zone I there is formed a zone having various intermetallic phases having an average total thickness between 8 and 50 μm , on which zone there is in turn arranged a covering layer containing aluminum oxide and/or hydroxide having an average thickness of at least 0.05 μm to at most 5 μm . The invention further relates to a method for producing the aforementioned component.

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Citation (opposition)
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