

Title (en)

METHOD FOR PRODUCING HARDENED STEEL COMPONENTS WITH A CONDITIONED ZINC ALLOY CORROSION PROTECTION LAYER

Title (de)

VERFAHREN ZUM HERSTELLEN GEHÄRTETER STAHLBAUTEILE MIT EINER KONDITIONIERTEN ZINKKORROSIONSSCHUTZSCHICHT

Title (fr)

PROCÉDÉ DE FABRICATION DE COMPOSANTS EN ACIER DURCI DOTÉ D'UNE COUCHE DE PROTECTION CONTRE LA CORROSION EN ALLIAGE DE ZINC CONDITIONNÉE

Publication

**EP 4110970 C0 20231004 (DE)**

Application

**EP 21707718 A 20210301**

Priority

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Abstract (en)

[origin: WO2021170860A1] The invention relates to a method for producing hardened steel components, wherein a sheet metal blank is cut out from a galvanised strip made of a hardenable steel alloy and the sheet metal blank is then cold-formed to produce a component blank and then heated to a temperature which causes a microstructural change to austenite, wherein the austenitised component blank is then fed to a shape hardening tool in which the component blank is interlockingly held by means of an upper and lower tool which have a shape that corresponds substantially to the component blank, wherein, due to the material of the component blank resting against the tools, that are in particular cooled, the heat is extracted from the steel material so quickly that martensitic hardening occurs, characterised in that tin is applied to the surface of the strip or of the sheet metal blank or of the component blank after the galvanisation of the metal strip and before the temperature is increased to bring about austenisation.

IPC 8 full level

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