

Title (en)
Method for manufacturing a body featuring very high mechanical properties, forming by cold drawing from a rolled steel sheet, in particular hot rolled and coated sheet

Title (de)
Verfahren zum Herstellen eines Bauteils mit sehr guten mechanischen Eigenschaften, Umformung durch kaltes Tiefziehen aus gewalztem, insbesondere warmgewalztem und beschichtetem Stahlblech

Title (fr)
Procédé de réalisation d'une pièce à très hautes caractéristiques mécaniques, mise en forme par emboutissage à froid, à partir d'une bande de tôle d'acier laminée et notamment laminée à chaud et revêtue

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Application
EP 06002618 A 20010404

Priority
• EP 01400861 A 20010404
• FR 0004427 A 20000407

Abstract (en)
The procedure for making stamped components with very high mechanical properties from sheet steel consists of cutting the sheet to make blanks, stamping the blanks to form the components, and applying before or after stamping a metallic surface coating that provides protection against corrosion, against decarburisation of the steel, and an optional lubrication function. Surplus steel necessary for the stamping operation is removed by cutting. The surface coating can be of zinc or a zinc-based alloy between 5 and 30 µm thick; it can be of zinc and iron or zinc-iron-aluminium, and the pre-coated steel can be subjected to a temperature of over 700 degrees C before stamping.

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Citation (search report)
• [Y] FR 537122 A 19220516
• [Y] FR 857779 A 19400928 - COSTE & CIE
• [A] FR 1107112 A 19551228 - KAISER ALUMINIUM CHEM CORP
• [A] EP 0438607 A1 19910731 - INLAND STEEL CO [US]
• [A] US 3248251 A 19660426 - CHARLOTTE ALLEN
• [A] FR 2534161 A1 19840413 - MAUBEUGE FER [FR]
• [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 259 (C - 441) 21 August 1987 (1987-08-21)

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Third party :
"Materials science and technology", vol. 7, 1992, article "Constitution and properties of steels: Formeln zur Berechnung der Austenitisierungstemperatur", XP003021411

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