

Title (en)

METHOD FOR PRODUCING A LOCALLY BORONIZED OR CHROMIZED COMPONENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES LOKAL BORIERTEN ODER CHROMIERTEN BAUTEILS

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE PIÈCE RECOUVERTE DE BORE OU DE CHROME LOCALEMENT

Publication

EP 3060692 A1 20160831 (DE)

Application

EP 14777331 A 20140930

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Abstract (en)

[origin: WO2015058932A1] The invention relates to a method for producing a component (1) which is made of a low-alloyed steel material and is exposed to pressure and wear at least in a locally limited region, said method comprising the following method steps: a) machining the component (1) in a state in which it has not been heat-treated, b) locally covering the component (1) with a powder (2) comprising essentially either boron or chromium, c) heat-treating the component (1) covered locally with powder (2) for the locally limited diffusion either of boron atoms from the boron-comprising powder or of chromium atoms from the chromium-comprising powder (2) into the marginal layer of the component (1) at a first temperature, which is greater than the austenitization temperature of the low-alloyed steel material, d) cooling the component (1) to room temperature and removing the powder (2), and e) heat-treating the component (1) again to set either a martensitic or a bainitic microstructure (4) at a second temperature, which is lower than the first temperature.

IPC 8 full level

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