

Title (en)

PROCESS FOR MANUFACTURING WORK-HARDENED METALLIC WORKPIECES BY FORGING OR PRESSING

Publication

EP 0101097 B1 19860423 (DE)

Application

EP 83200763 A 19830530

Priority

CH 447382 A 19820722

Abstract (en)

[origin: EP0101097A1] 1. Process for the production of a work-hardened metallic workpiece from an austenitic iron or nickel alloy, capable of extensive work-hardening, by forging or pressing in a preheated and heated mould formed as a die, characterised in that the forging blank present as a preform is converted into the end product in a single working pass in one heat with the use of a single mould, forming being accomplished essentially in a first working phase and work-hardening of the workpiece being accomplished essentially in a second working phase, the forging blank being brought to different initial temperatures in different parts of its geometry as a function of the location and being deformed in the various parts in such a way that the degree of work-hardening over the entire workpiece reaches approximately the same value, and that the workpiece is finally cooled to room temperature.

IPC 1-7

B21J 5/00; **C21D 7/00**; **B21K 3/04**

IPC 8 full level

B21J 1/06 (2006.01); **B21J 5/00** (2006.01); **B21K 3/04** (2006.01); **C21D 7/00** (2006.01); **C21D 8/00** (2006.01)

CPC (source: EP)

B21J 5/00 (2013.01); **B21K 3/04** (2013.01); **C21D 7/00** (2013.01); **C21D 8/005** (2013.01)

Citation (examination)

SHEET METAL INDUSTRIES, Band 49, Nr. 1, Januar 1972, London, GB. V.J. McNEELY et al.: "Higher-strength austenitic stainless steels", Seiten 17-25

Cited by

US6772499B2; DE102004062174A1; EP0142668A1; CH654593A5; US7571528B2

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