

Title (en)

Method of making workpieces, with excellent mechanical properties, from non-treated steel.

Title (de)

Verfahren zum Herstellen von Werkstücken mit hervorragenden mechanischen Eigenschaften aus nichtbehandeltem Stahl.

Title (fr)

Procédé de fabrication de pièces à hautes caractéristiques mécaniques à partir d'acier non traité.

Publication

EP 0407275 B1 19941214 (FR)

Application

EP 90401879 A 19900629

Priority

FR 8909189 A 19890707

Abstract (en)

[origin: EP0407275A1] Process for the manufacture of components from untreated steel, comprising a succession of thermal treatment and forming operations, characterised by the following successive operations: - heating the steel to a temperature above the transformation (austenitisation) point, - isothermal quenching in a fluidised bed bath immediately following the austenitisation heating, endowing the steel with a bainitic structure, and - forming of the components at mild heat. t

IPC 1-7

C21D 8/00

IPC 8 full level

C21D 7/00 (2006.01); **C21D 8/00** (2006.01); **C21D 7/06** (2006.01)

CPC (source: EP)

C21D 7/00 (2013.01); **C21D 8/00** (2013.01); **C21D 7/06** (2013.01)

Citation (examination)

US 3240634 A 19660315 - NACHTMAN ELLIOT S

Cited by

EP2585621A4; EP2641990B1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0407275 A1 19910109; **EP 0407275 B1 19941214**; AT E115638 T1 19941215; CA 2020595 A1 19910108; CA 2020595 C 20010703; DE 69015028 D1 19950126; DE 69015028 T2 19950720; ES 2068354 T3 19950416; FR 2649415 A1 19910111; FR 2649415 B1 19911031; JP H0353018 A 19910307

DOCDB simple family (application)

EP 90401879 A 19900629; AT 90401879 T 19900629; CA 2020595 A 19900706; DE 69015028 T 19900629; ES 90401879 T 19900629; FR 8909189 A 19890707; JP 17942190 A 19900706