

Title (en)
METHOD OF MANUFACTURING A HARDENED FORGED STEEL COMPONENT

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES GEHÄRTETEN GESCHMIEDETEN STAHLBAUTEILS

Title (fr)
PROCÉDÉ DE FABRICATION D'UN COMPOSANT EN ACIER TREMPÉ FORGÉ

Publication
EP 1789597 A1 20070530 (EN)

Application
EP 05769695 A 20050816

Priority
• AU 2005001090 W 20050816
• AU 2004904672 A 20040818

Abstract (en)
[origin: WO2006017880A1] A method of manufacturing steel components particularly suited to components such as steering racks having net shape forged gear teeth. The method comprising heating at least a portion of a steel blank to a first temperature of at least 600 °C, forging the portion to shape, cooling the portion in a controlled manner to a second temperature above 200 °C, then immediately heating at least part of the surface of the portion to an austenising temperature, and then quenching the portion to harden the surface.

IPC 8 full level
C21D 8/00 (2006.01); **B21K 1/00** (2006.01); **C21D 1/02** (2006.01); **C21D 1/06** (2006.01); **C21D 1/10** (2006.01); **C21D 1/18** (2006.01); **C21D 1/20** (2006.01); **C21D 7/13** (2006.01); **C21D 9/00** (2006.01); **C21D 9/32** (2006.01)

CPC (source: EP KR US)
B21K 1/767 (2013.01 - EP US); **C21D 1/02** (2013.01 - KR); **C21D 1/06** (2013.01 - EP KR US); **C21D 1/10** (2013.01 - EP US); **C21D 1/18** (2013.01 - EP US); **C21D 1/20** (2013.01 - EP US); **C21D 7/13** (2013.01 - EP KR US); **C21D 8/00** (2013.01 - EP KR US); **C21D 9/0068** (2013.01 - EP US); **C21D 9/32** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006017880 A1 20060223; CN 101006189 A 20070725; CN 101006189 B 20110518; EP 1789597 A1 20070530; EP 1789597 A4 20091028; JP 2008510070 A 20080403; KR 20070046103 A 20070502; MX 2007002009 A 20070423; US 2007246135 A1 20071025

DOCDB simple family (application)
AU 2005001090 W 20050816; CN 200580028615 A 20050816; EP 05769695 A 20050816; JP 2007526114 A 20050816; KR 20077002902 A 20070206; MX 2007002009 A 20050816; US 66003405 A 20050816