

Title (en)
HEAT-TREATMENT PROCESS FOR A STEEL

Title (de)
WÄRMEBEHANDLUNGSVERFAHREN FÜR EINEN STAHL

Title (fr)
PROCÉDÉ DE TRAITEMENT THERMIQUE POUR UN ACIER

Publication
EP 2198061 A4 20151014 (EN)

Application
EP 08835034 A 20081003

Priority
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• GB 0719457 A 20071004

Abstract (en)
[origin: WO2009045146A1] A process for inducing a compressive residual stress in a surface region of a steel component, the process comprising a heat treatment having the following steps: (i) providing a component comprising a steel composition; (ii) induction heating at least a part of the component followed by quenching said at least part, wherein the hardness in a surface region of the component is increased; and (iii) subsequently performing a martensite and/or bainite through hardening step to obtain a microstructure comprising martensite and/or bainite.

IPC 8 full level
C21D 1/10 (2006.01); **C21D 1/78** (2006.01); **C21D 9/36** (2006.01)

CPC (source: EP US)
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Citation (search report)
• [X] CA 1088579 A2
• [XYI] US 6390924 B1 20020521 - YOSHIDA KAZUHIKO [JP], et al
• [XI] JP 2000213553 A 20000802 - NTN TOYO BEARING CO LTD
• [Y] EP 0425863 A1 19910508 - GKN AUTOMOTIVE AG [DE], et al
• [A] JP 2005048211 A 20050224 - JFE STEEL KK
• See references of WO 2009045146A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
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