

Title (en)

Process and apparatus for heat treating of metallic workpieces

Title (de)

Verfahren und Vorrichtung zur Wärmebehandlung metallischer Werkstücke

Title (fr)

Procédé et appareil de traitement thermique de pièces métalliques

Publication

EP 1160349 B1 20040818 (DE)

Application

EP 00111129 A 20000524

Priority

EP 00111129 A 20000524

Abstract (en)

[origin: EP1160349A1] Apparatus for heat treating metallic workpieces comprises a heating chamber in which the workpieces are heated and subjected to a gas atmosphere containing nitrogen and a hydrocarbon; and devices for introducing nitrogen and hydrocarbons into the gas atmosphere depending on the carburizing index which represents the carbon content in the edge layer. An Independent claim is also included for a heat treatment process using the above apparatus. The apparatus preferably also has devices for introducing ammonia. The heating chamber is hermetically sealed and is flushed with an inert gas, preferably nitrogen.

IPC 1-7

C23C 8/22; C23C 8/32

IPC 8 full level

C23C 8/22 (2006.01); C23C 8/32 (2006.01)

CPC (source: EP)

C23C 8/22 (2013.01); C23C 8/32 (2013.01)

Cited by

WO2012048669A1; WO2006111683A1; DE102010028165A1; FR2884523A1; US10280500B2; US7550049B2; WO2004040033A1;
WO2016046265A1; US8303731B2; WO2005038076A1; WO03097893A1; WO2008083031A1

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