

Title (en)

Process for preventing surface oxidation during steel carburizing

Title (de)

Verfahren zur Vermeidung von Randoxidation beim Aufkohlen von Stählen

Title (fr)

Procédé pour empêcher l'oxydation superficielle pendant la carburation des aciers

Publication

EP 0662525 B1 19970625 (DE)

Application

EP 94202796 A 19940927

Priority

DE 4400391 A 19940108

Abstract (en)

[origin: EP0662525A1] Preventing of surface oxidn. in the carburisation of steels under a carbon-contg. gas mixt. at carburisation temp. is novel in that the steels are heated up to the carburisation temp. under a nitrogen/hydrogen gas mixt. or with pure hydrogen and during the carburisation the nitrogen/hydrogen gas mixt. or the hydrogen is replaced by a carbon-contg. gas mixt with an oxygen activity smaller than that necessary for the formation of manganese (II) or chromium (III) oxide.

IPC 1-7

C23C 8/22; C21D 1/76; C21D 3/06

IPC 8 full level

C21D 1/76 (2006.01); **C21D 3/06** (2006.01); **C23C 8/22** (2006.01)

CPC (source: EP US)

C21D 3/06 (2013.01 - EP US); **C23C 8/22** (2013.01 - EP US); **C21D 1/76** (2013.01 - EP US)

Cited by

EP3168314A1; FR2826376A1; FR2847591A1; DE10321414A1; DE10321414B4; WO03000947A1

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EP 94202796 A 19940927; AT 94202796 T 19940927; DE 4400391 A 19940108; DE 59403219 T 19940927; US 31916694 A 19941006