

Title (en)

PROCESS FOR THE ADJUSTABLE CARBURIZING OR HEATING IN A PROTECTIVE GAS OF STEEL WORK PIECES

Publication

EP 0031034 B1 19850925 (DE)

Application

EP 80107178 A 19801119

Priority

CH 1130379 A 19791220

Abstract (en)

[origin: EP0031034A1] In the controllable carburising, or heating in a protective atmosphere, of steel workpieces in a carburising furnace (1), the furnace is supplied with methanol and nitrogen via a methanol feed line (6) and a nitrogen feed line (13) and a carrier gas is generated from these within the furnace. Additionally, an oxygenated derivative of a hydrocarbon is supplied as a carburising agent from a source (4) via a line (8), and by appropriate metering of the nitrogen supply, a predetermined C level of the furnace atmosphere can be maintained with a minimum of carrier gas.
<IMAGE>

IPC 1-7

C23C 8/22; C21D 1/76; C21D 1/74

IPC 8 full level

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

CPC (source: EP)

C21D 1/76 (2013.01); **C23C 8/22** (2013.01)

Citation (examination)

- Metal Progress, Bd. 114, Nov. 1978, S. 24-31
- Härterei Technische Mitteilungen, Bd. 35, 1980, nr. 6, S, 284-288

Cited by

CN113913731A; EP0096602A1; FR2538092A1; DE10321414B4; DE3810775A1; US4928477A

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DOCDB simple family (publication)

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DE 3019830 C2 19830324; DE 3071126 D1 19851031; FR 2472034 A1 19810626; FR 2472034 B1 19860516; GB 2066301 A 19810708;
GB 2066301 B 19840125; IT 1149924 B 19861210; IT 8026589 A0 19801212; JP S5696070 A 19810803; JP S6350430 B2 19881007;
SU 1261567 A3 19860930

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FR 8027025 A 19801219; GB 8040423 A 19801217; IT 2658980 A 19801212; JP 17905380 A 19801219; SU 3225001 A 19801219