

Title (en)
PROCESS FOR CARBURIZING STEEL

Publication
EP 0288680 A3 19900131 (DE)

Application
EP 88102679 A 19880224

Priority
DE 3714283 A 19870429

Abstract (en)
[origin: US4881982A] A method for gaseous carburization of steel, where, in a carbon-rich gaseous atmosphere, an article that is to be carburized is, in a first carburization phase, exposed to a carbon charge that is as great as possible, at the black limit, and, in a subsequent diffusion phase, a lower carbon charge that corresponds to the desired carbon content at the surface of the article is established, with carburization being regulated via the two target values carbon content at the surface and depth of carburization. In order, independent of the carbide limit, to provide a regulation with which it is possible to achieve in a straightforward manner, reliably and reproducibly, the desired carbon content curve (carbon profile) in the article, at least one further target value that is characteristic of the carbon content curve is used to regulate the carburization. When this additional target value is reached, the carbon level that characterizes the carburization phase is reduced, and the diffusion phase is initiated.

IPC 1-7
C23C 8/22

IPC 8 full level
C23C 8/22 (2006.01)

CPC (source: EP US)
C23C 8/22 (2013.01 - EP US)

Citation (search report)

- [A] EP 0156378 A2 19851002 - WUENNING JOACHIM
- [A] DE 1222762 B 19660811 - BBC BROWN BOVERI & CIE
- [A] DE 3139622 A1 19830421 - WUENNING JOACHIM
- [A] DE 3507527 A1 19860522 - SCHWING EWALD [DE], et al
- [A] US RE26935 E 19700818
- [A] EP 0213011 A1 19870304 - AIR LIQUIDE [FR]
- [A] PATENT ABSTRACTS OF JAPAN, Band 7, Nr. 235 (C-191)[1380], 19 Oktober 1983; & JP-A-58 126 975 (KOMATSU SEISAKUSHO K.K.) 28-07-1983

Cited by
DE4238993C1; GB2202238B; EP0408511A1; FR2656003A1; EP0781858B2

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