

Title (en)

Case hardening steel and carburized part using same

Title (de)

Einsatzgehärteter Stahl und aufgekohltes Werkstück aus diesem Stahl

Title (fr)

Acier de cémentation et pièce cémentée fabriquée en cet acier

Publication

EP 1277847 A1 20030122 (EN)

Application

EP 02015081 A 20020705

Priority

- JP 2001216990 A 20010717
- JP 2002075624 A 20020319

Abstract (en)

A case hardening steel high in impact strength, consists essentially of carbon in an amount of from 0.1 to 0.3 % by weight, silicon in an amount of from more than 0.3 to 1.0 % by weight, manganese in an amount of from 0.3 to 1.7 % by weight, phosphorus in an amount of not more than 0.03 % by weight, sulfur in an amount of not more than 0.03 % by weight, molybdenum in an amount of not more than 1.0 % by weight, aluminum in an amount of not more than 0.04 % by weight, nitrogen in an amount of not more than 0.03 % by weight, and balance being iron and inevitable impurities. The case hardening steel meets an equation of $\text{AC} \% + 5(\text{AP} \% + \text{AS} \%) \leq (\text{AMn} \% + \text{AMo} \% + 1.8) / 8$. <IMAGE>

IPC 1-7

C22C 38/00; **C22C 38/02**; **C22C 38/04**; **C23C 8/26**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/04** (2006.01); **C22C 38/12** (2006.01); **C22C 38/18** (2006.01); **C22C 38/22** (2006.01); **C22C 38/26** (2006.01); **C22C 38/32** (2006.01); **C22C 38/60** (2006.01); **C23C 8/22** (2006.01); **C23C 8/38** (2006.01); **C23C 8/46** (2006.01); **C23C 8/66** (2006.01)

CPC (source: EP US)

C22C 38/04 (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C23C 8/22** (2013.01 - EP US)

Citation (search report)

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- [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11 26 December 1995 (1995-12-26)
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