

Title (en)

USE OF PRECIPITATION HARDENING FERRITIC-PERLITIC STEELS AS MATERIAL FOR VALVES OF COMBUSTION ENGINES

Publication

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Application

EP 90110888 A 19900608

Priority

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Abstract (en)

[origin: EP0411282A2] The invention relates to the use of precipitation-hardenable ferritic-perlitic steels, consisting of 0.20 to 0.60% of carbon 0.20 to 0.95% of silicon 0.50 to 1.80% of manganese 0.004 to 0.04% of nitrogen and 0.05 to 0.20% of vanadium and/or niobium, the remainder being iron and impurities from the smelting process, as a material for gas reversing valves of combustion engines.

IPC 1-7

C22C 38/12; **C22C 38/60**

IPC 8 full level

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CPC (source: EP KR)

C22C 38/00 (2013.01 - KR); **C22C 38/12** (2013.01 - EP KR); **F01L 3/02** (2013.01 - EP)

Citation (search report)

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CN104895695A; WO9517529A1

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AT BE CH DE DK ES FR GB GR IT LI LU NL SE

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DE 4014072 A1 19901220; **DE 4014072 C2 19911205**; CA 2018636 A1 19901209; CA 2018636 C 20001024; DE 59002456 D1 19930930; EP 0411282 A2 19910206; EP 0411282 A3 19910731; EP 0411282 B1 19930825; ES 2045652 T3 19940116; FI 902899 A0 19900611; FI 96327 B 19960229; FI 96327 C 19960610; JP 2820776 B2 19981105; JP H03219045 A 19910926; KR 0151154 B1 19981116; KR 910001081 A 19910130

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