Title (en)

Process for improving the wear resistance and corrosion resistance of ferrous metal workpieces

Title (de)

Verfahren zur Verbesserung des Verschleissfestigkeit und Korrosionswiderstand von Eisenmetalgegenständen

Title (fr)

Procédé pour améliorer la résistance à l'usure et à la corrosion de pièces en métaux ferreux

Publication

EP 0638661 B1 19970122 (FR)

Application

EP 94401716 A 19940726

Priority

FR 9309814 A 19930810

Abstract (en)

[origin: EP0638661A1] The process consists in immersing the articles which have previously undergone a thermochemical diffusion of either nitriding or sulphonitriding or carbonitriding type, in a bath of molten salts made up of alkali metal carbonates, nitrates, hydroxides and their oxygenated salts, the relative anionic weight quantities of carbonates, nitrates and hydroxides, expressed for sodium salts and corresponding to the active, that is to say liquid, phase of the bath being the following: 11 < CO<2-> < 23 19 < NO3<-> < 37 6 < OH<-> < 19 while the weight quantity of oxygenated salts of alkali metals, expressed as Cr2O7<2-> equivalent, is the following: 0.05 < oxygenated anions < 0.5. This process makes it possible to guarantee a high degree of reproducibility of the results, whatever the type of articles treated.

IPC 1-7

C23C 22/72; C23C 8/80

IPC 8 full level

C23C 8/42 (2006.01); **C23C 8/50** (2006.01); **C23C 8/80** (2006.01); **C23C 22/72** (2006.01); **C23C 28/04** (2006.01); **C23F 15/00** (2006.01)

CPC (source: EP KR)

C23C 8/50 (2013.01 - KR); **C23C 8/80** (2013.01 - EP KR); **C23C 22/72** (2013.01 - EP)

Cited by

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EP 0638661 A1 19950215; **EP 0638661 B1 19970122**; AT E148178 T1 19970215; BR 9403101 A 19950411; CA 2129162 A1 19950211; CA 2129162 C 20001212; CN 1054891 C 20000726; CN 1101684 A 19950419; DE 69401551 D1 19970306; DE 69401551 T2 19970703; ES 2097012 T3 19970316; FR 2708941 A1 19950217; FR 2708941 B1 19951027; JP 3083453 B2 20000904; JP H0776766 A 19950320; KR 100273924 B1 20001215; KR 950006020 A 19950320; MY 111901 A 20010228; PL 177228 B1 19991029; PL 304595 A1 19950220; TW 259815 B 19951011

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