

Title (en)

Bearing steel excellent in corrosion resistance

Title (de)

Lagerstahl mit guter Korrosionsbeständigkeit

Title (fr)

Acier pour roulements ayant une excellente résistance à la corrosion

Publication

EP 1420078 B1 20190227 (EN)

Application

EP 03026063 A 20031112

Priority

JP 2002328854 A 20021112

Abstract (en)

[origin: EP1420078A2] Bearing steel containing 0.10 wt% to 0.35 wt% of C, less than 0.5 wt% of Si, 0.3 wt% to 1.5 wt% of Mn, 0.03 wt% or less of P, 0.03 wt% or less of S, 1.0 wt% to 3.5 wt% of Ni, 1.0 wt% to 5.0 wt% of Cr, 0.03 wt% to 2.5 wt% of Mo, 0.005 wt% to 0.050 wt% of Al, 0.003 wt% or less of Ti, 0.0015 wt% or less of O, 0.025 wt% or less of N, and a substantially residual part of Fe, wherein the bearing steel after carburizing or carbonitriding treatment exhibits a surface C concentration of not lower than 0.9 %, contains 15 % by area or less of carbide and contains 0.1 % by area or less of rod-like carbide 10 having an aspect ratio of not lower than 3 in terms of the ratio of major diameter to minor diameter and having a minor diameter of not smaller than 2 µm.

IPC 8 full level

C22C 38/44 (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C23C 8/22** (2006.01); **C23C 8/32** (2006.01)

CPC (source: EP US)

C22C 38/001 (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C23C 8/22** (2013.01 - EP US); **C23C 8/32** (2013.01 - EP US)

Cited by

CN106893947A; EP2169082A1; EP1978124A1; US8343255B2; WO2016107517A1

Designated contracting state (EPC)

DE FR

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EP 1420078 A2 20040519; **EP 1420078 A3 20060503**; **EP 1420078 B1 20190227**; US 2004094238 A1 20040520

DOCDB simple family (application)

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