

Title (en)

Steel for high-speed cold working and method for production thereof, and part formed by high-speed cold working and method for production thereof

Title (de)

Stahl zur Hochgeschwindigkeits-Kaltbearbeitung und Herstellungsverfahren dafür sowie durch Hochgeschwindigkeits-Kaltbearbeitung geformtes Teil und Herstellungsverfahren dafür

Title (fr)

Acier pour travail à froid à vitesse élevée et son procédé de production, et partie formée par un travail à froid à vitesse élevée et procédé correspondant

Publication

EP 1939309 A1 20080702 (EN)

Application

EP 07023882 A 20071210

Priority

- JP 2006355497 A 20061228
- JP 2007097457 A 20070403
- JP 2007103027 A 20070410

Abstract (en)

Disclosed herein is a steel for high-speed cold working which exhibits good cold workability during working and also exhibits high hardness after working. The steel for high-speed cold working contains C : 0.03 to 0.6% (by mass), Si : 0.005 to 0.6%, Mn : 0.05 to 2%, P : no more than 0.05% (excluding 0%), S : no more than 0.05% (excluding 0%), and N : no more than 0.04% (excluding 0%), with the remainder being iron and inevitable impurities and the amount of dissolved nitrogen in the steel being no less than 0.006%.

IPC 8 full level

C21D 8/06 (2006.01); **C21D 9/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01)

CPC (source: EP KR US)

C21D 8/065 (2013.01 - EP KR US); **C21D 9/0093** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US)

Citation (applicant)

- JP 3515923 B2 20040405
- JP S6082618 A 19850510 - SUMITOMO METAL IND
- JP S5760416 A 19820412 - KANBISHI DENKI SEIZO
- JP 2003266144 A 20030924 - HONDA MOTOR CO LTD

Citation (search report)

- [XA] EP 1191114 A1 20020327 - KAWASAKI STEEL CO [JP]
- [X] EP 0943696 A1 19990922 - KAWASAKI STEEL CO [JP], et al
- [A] JP 2000219938 A 20000808 - NIPPON STEEL CORP
- [A] US 3900347 A 19750819 - LORENZETTI JAMES J, et al
- [A] JP H11199926 A 19990727 - TOA STEEL CO LTD

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WO2016010456A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

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DOCDB simple family (application)

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