

Title (en)

HIGH-SPEED-TOOL STEEL AND METHOD FOR PRODUCING SAME

Title (de)

HOCHGESCHWINDIGKEITSWERKZEUGSTAHL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ACIER POUR OUTIL À VITESSE ÉLEVÉE ET PROCÉDÉ DE PRODUCTION DE CE DERNIER

Publication

EP 3050986 A4 20170517 (EN)

Application

EP 14847363 A 20140624

Priority

- JP 2013201392 A 20130927
- JP 2014066736 W 20140624

Abstract (en)

[origin: EP3050986A1] A high speed tool steel including by mass%: C at from 0.40 to 0.90%; Si at 1.00% or less; Mn at 1.00% or less; Cr at from 4.00 to 6.00%; one or both of W and Mo at a content determined by the relational expression (Mo+0.5W) of from 1.50 to 6.00%; and one or both of V and Nb at a content determined by the relational expression (V+Nb) of from 0.50 to 3.00%, in which the content of N is 0.0200% or less, the balance includes Fe and impurities, and the maximum value of the equivalent circle diameter of a carbide in a sectional structure is 1.00 µm or less.

IPC 8 full level

C22C 38/00 (2006.01); **C21C 7/00** (2006.01); **C21D 8/06** (2006.01); **C22B 9/16** (2006.01); **C22C 38/26** (2006.01); **C22C 38/52** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] EP 1469094 A1 20041020 - HITACHI METALS LTD [JP]
- [A] EP 1511873 A1 20050309 - UDDEHOLM TOOLING AB [SE]
- [A] EP 1511872 A1 20050309 - UDDEHOLM TOOLING AB [SE]
- [A] EP 2223763 A1 20100901 - BOEHLER EDELSTAHL GMBH & CO KG [AT]
- [A] US 6761853 B2 20040713 - ISHIDA KIYOHITO [JP], et al
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DOCDB simple family (publication)

EP 3050986 A1 20160803; **EP 3050986 A4 20170517**; **EP 3050986 B1 20190731**; CN 105579604 A 20160511; CN 111411293 A 20200714; JP 2018048407 A 20180329; JP 6474348 B2 20190227; JP WO2015045528 A1 20170309; TW 201527549 A 20150716; TW I654318 B 20190321; WO 2015045528 A1 20150402

DOCDB simple family (application)

EP 14847363 A 20140624; CN 201480052482 A 20140624; CN 202010142274 A 20140624; JP 2014066736 W 20140624; JP 2015538960 A 20140624; JP 2017215934 A 20171108; TW 103125359 A 20140724