

Title (en)

Hot work tool steel and steel product using the same

Title (de)

Warmarbeitsstahl und Stahlprodukt damit

Title (fr)

Acier pour outil de travail à chaud et produit d'acier l'utilisant

Publication

**EP 2270245 B1 20151216 (EN)**

Application

**EP 10006150 A 20100614**

Priority

JP 2009143377 A 20090616

Abstract (en)

[origin: EP2270245A1] The present invention provides a hot work tool steel containing: 0.20#C#0.50 mass%, 0.40<Si<0.75 mass%, 0.50<Mn#1.50 mass%, 5.24#Cr#9.00 mass%, 1.08<Mo<2.99 mass%, and, 0.30<V<0.70 mass%, with the balance being Fe and unavoidable impurities; and a steel product using the hot work tool steel. The hot work tool steel is capable of improving the thermal conductivity as compared with general-purpose die steel (JIS SKD61) and has a higher impact value than that of general-purpose die steel while maintaining machinability at a level equal to or higher than that of general-purpose die steel.

IPC 8 full level

**C22C 33/00** (2006.01); **C22C 33/04** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01)

CPC (source: EP KR)

**C22C 33/006** (2013.01 - EP KR); **C22C 33/04** (2013.01 - EP KR); **C22C 38/002** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR); **C22C 38/04** (2013.01 - EP KR); **C22C 38/22** (2013.01 - EP KR); **C22C 38/24** (2013.01 - EP KR); **C22C 38/60** (2013.01 - KR)

Cited by

CN102719758A; EP2915895A3; CN112011740A; CN115058665A; CN113122684A; CN116024500A; CN115354238A; EP2662460A1; CN106048455A; CN110373611A; US11141778B2; US10988823B2; US11319621B2; WO2013167628A1; WO2014131907A1; EP2737098B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**EP 2270245 A1 20110105**; **EP 2270245 B1 20151216**; CN 101921958 A 20101222; CN 101921958 B 20150218; JP 2011001573 A 20110106; JP 5515442 B2 20140611; KR 20100135206 A 20101224

DOCDB simple family (application)

**EP 10006150 A 20100614**; CN 201010203494 A 20100612; JP 2009143377 A 20090616; KR 20100057289 A 20100616