

Title (en)
STEEL ALLOY FOR CUTTING DETAILS

Title (de)
STAHLLEGIERUNG ZUM DETAILSCHNEIDEN

Title (fr)
ALLIAGE A BASE D'ACIER POUR LE DECOUPAGE DE PIECES MECANIQUES

Publication
EP 1735478 A1 20061227 (EN)

Application
EP 05728087 A 20050322

Priority
• SE 2005000422 W 20050322
• SE 0400806 A 20040326

Abstract (en)
[origin: WO2005093112A1] The invention relates to a steel alloy of the following composition (in % by weight) C 0,40-0,60 Si 0,1-1,0 Mn 0,3-1,0 Cr 12-15 MO 2,5-4,0 Ni 0-1,0 Co 0-4,0 N 0,15-0,20, with the balance Fe as well as normally occurring impurities, the hardness being > 56 HRC, which has been attained without deep freezing, as well as PRE > 25, defined as PRE = % Cr + 3,3 . % Mo + 16 . % N. Furthermore, the steel alloy comprises carbides, nitrides and/or carbonitrides the maximal diameter of which does not exceed 5 µm. This steel alloy has turned out surprisingly well suitable as edge material for a plurality of cutting operations.

IPC 8 full level
C22C 38/22 (2006.01); **C22C 38/30** (2006.01); **C22C 38/44** (2006.01); **C22C 38/52** (2006.01)

IPC 8 main group level
C22C (2006.01)

CPC (source: EP SE US)
C22C 38/001 (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/22** (2013.01 - SE);
C22C 38/44 (2013.01 - EP US)

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005093112 A1 20051006; AT E471392 T1 20100715; AU 2005226606 A1 20051006; AU 2005226606 B2 20100408;
CN 100463996 C 20090225; CN 1918315 A 20070221; DE 602005021872 D1 20100729; EP 1735478 A1 20061227; EP 1735478 B1 20100616;
JP 2007530784 A 20071101; SE 0400806 D0 20040326; SE 0400806 L 20050927; SE 526805 C2 20051108; SE 526805 C8 20060912;
US 2007274855 A1 20071129

DOCDB simple family (application)
SE 2005000422 W 20050322; AT 05728087 T 20050322; AU 2005226606 A 20050322; CN 200580004712 A 20050322;
DE 602005021872 T 20050322; EP 05728087 A 20050322; JP 2007504917 A 20050322; SE 0400806 A 20040326; US 58424605 A 20050322