

Title (en)
STEEL, AND PROCESSING METHOD FOR THE PRODUCTION OF HIGHER-STRENGTH FRACTURE-SPLITTABLE MACHINE COMPONENTS

Title (de)
STAHL UND VERARBEITUNGSVERFAHREN FÜR DIE HERSTELLUNG VON HÖHERFESTEN BRUCHTRENNBAREN MASCHINENBAUTEILEN

Title (fr)
ACIER ET PROCÉDÉ DE TRANSFORMATION POUR PRODUIRE DES PIÈCES MÉCANIQUES POUVANT ÊTRE SÉPARÉES PAR RUPTURE PRÉSENTANT UNE RÉSISTANCE ACCRUE

Publication
EP 2057298 A1 20090513 (DE)

Application
EP 07801178 A 20070727

Priority
• DE 2007001337 W 20070727
• DE 102006041146 A 20060901

Abstract (en)
[origin: CA2666677A1] The invention relates to a steel and a processing method for higher-strength fracture-splittable machine components that are composed of at least two fracture-splittable parts. Said steel and method are characterized in that the chemical composition of the steel (expressed in percent by weight) is as follows: 0.40% ≤ C ≤ 0.60%; 0.20% ≤ Si ≤ 1.00%; 0.50% ≤ Mn ≤ 1.50%; 0% ≤ Cr ≤ 1.00%; 0% ≤ Ni ≤ 0.50%; 0% ≤ Mo ≤ 0.20%; 0% ≤ Nb ≤ 0.050%; 0% ≤ V ≤ 0.30%; 0% ≤ Al ≤ 0.05%; 0.005% ≤ N ≤ 0.020%, the rest being composed of iron and smelting-related impurities and residual matter.

IPC 8 full level
C22C 38/12 (2006.01)

CPC (source: EP KR US)
C22C 38/001 (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2008028447A1

Citation (third parties)
Third party :
• EP 0779375 B1 20000607 - ASCOMETAL SA [FR]
• EP 1051531 B1 20010829 - ASCOMETAL SA [FR]

Cited by
EP3168319A4

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)
BA HR MK RS

DOCDB simple family (publication)
DE 102006041146 A1 20080306; AR 062184 A1 20081022; AU 2007294317 A1 20080313; AU 2007294317 B2 20111013; BR PI0716206 A2 20131112; CA 2666677 A1 20080313; CN 101542007 A 20090923; EP 2057298 A1 20090513; EP 2057298 B1 20121114; JP 2010501733 A 20100121; KR 20090049591 A 20090518; MX 2009001971 A 20090309; RU 2009111860 A 20101010; RU 2441093 C2 20120127; TW 200825188 A 20080616; US 2010186855 A1 20100729; WO 2008028447 A1 20080313; ZA 200900848 B 20091230

DOCDB simple family (application)
DE 102006041146 A 20060901; AR P070103409 A 20070802; AU 2007294317 A 20070727; BR PI0716206 A 20070727; CA 2666677 A 20070727; CN 200780031954 A 20070727; DE 2007001337 W 20070727; EP 07801178 A 20070727; JP 2009525910 A 20070727; KR 20097003628 A 20090223; MX 2009001971 A 20070727; RU 2009111860 A 20070727; TW 96122683 A 20070623; US 31058807 A 20070727; ZA 200900848 A 20090205