

Title (en)

Low alloy steel for the manufacture of moulds for plastic materials or for rubber articles

Title (de)

Niedrig legierter Stahl zur Herstellung von Spritzformen für plastische Werkstoffe oder für Gegenstände aus Gummi

Title (fr)

Acier faiblement allié pour la fabrication de moules pour matières plastiques ou pour caoutchouc

Publication

EP 0709481 B1 20000126 (FR)

Application

EP 95402230 A 19951006

Priority

FR 9413029 A 19941031

Abstract (en)

[origin: EP0709481A1] The low alloy steel comprises (wt.%): 0.24-0.35 C; 1-2.5 Mn; 0.3-2.5 Cr; 0.2-1.6 W; 0.1-0.8 (Mo+W/2); 0-25 Ni; 0-0.3 V; 0-0.5 Si; 0.002-0.005 B; 0.005-0.1 Al; 0-0.1 Ti; 0-0.02 P; and 0-2 Cu. There may also be present less than 0.1% of at least one of the following: Nb, Zr, S, Se, Te, Bi, Ca, Sb, Pb, In and rare earth elements. The remainder is Fe plus possible impurities. The compsn. also satisfies the following equations: $U = 409(\%C) + 19.3(\%Cr + \%Mo + \%W/2) + \%V + 29.4(\%Si) + 10(\%Mn) + 7.2(\%Ni) < 200$ and $R = 3.82(\%C) + 9.79(\%Si) + 3.34(\%Mn) + 11.94(\%P) + 2.39(\%Ni) + 1.43(\%Cr) + 1.43(\%Mo + W/2) < 11.14$.

IPC 1-7

C22C 38/32; **C22C 38/54**

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/32** (2006.01); **C22C 38/54** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP US)

C22C 38/32 (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US)

Cited by

CN110565009A; EP2660348A4; EP1251187A1; CN101857946A; FR2838137A1; EP2644717A3; FR2838138A1; CN1317416C; AU2003258841B2; WO03083153A1; WO9734021A1; WO03083154A1; WO02083965A1; EP0725156B1

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