

Title (en)

Use of a tool steel for plastic material molds

Title (de)

Verwendung eines Werkzeugstahles für Kunststoffformen

Title (fr)

Utilisation d'un acier à outils pour moules pour le plastique

Publication

EP 1251187 B1 20030702 (DE)

Application

EP 01109276 A 20010417

Priority

EP 01109276 A 20010417

Abstract (en)

[origin: EP1251187A1] Use of tool steel in the manufacture of molds for plastic parts is new. The steel contains (wt.%): <??>(1) carbon (0.25-0.3); <??>(2) silicon (0.04-0.2); <??>(3) manganese (1.2-2.0); <??>(4) chromium (1.0-2.0); <??>(5) nickel (0.9-1.5); <??>(6) molybdenum (0.3-0.8); <??>(7) vanadium (≤ 0.2); and <??>(8) aluminum and a balance of iron (0.01-0.03). <??>Preferred Features: The steel contains 0.9-1.2 wt.% nickel, 0.04-0.15 wt.% silicon, 1.2-1.6 wt.% manganese, 0.4-0.6 wt.% molybdenum, 0.05-0.15 wt.% vanadium and 0.008-0.15 wt.% sulfur. The steel is pre-hardened using water or a polymer.

IPC 1-7

C22C 38/44

IPC 8 full level

C21D 1/18 (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C21D 9/00** (2006.01)

CPC (source: EP US)

C21D 1/18 (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C21D 9/0068** (2013.01 - EP US)

Cited by

EP3211109A1; DE102016103283A1; EP3587066A1; DE202012003298U1; EP2644717A2; US9522485B2; EP3587066B1

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