

Title (en)
Powdered high speed tool steel.

Title (de)
Schnellstahlpulver.

Title (fr)
Poudre d'acier rapide.

Publication
EP 0377307 B1 19940406 (EN)

Application
EP 89313418 A 19891221

Priority
JP 33007788 A 19881227

Abstract (en)
[origin: EP0377307A1] Disclosed is a powdered high speed tool steel of good wear resistance and toughness. The powdered high speed tool steel have the alloy composition essentially consisting of 1.2 - 4.5 % of C, up to 3.0 % of Si, up to 3.0 % of Mn, 3.0 - 6.0 % of Cr, 15.0 - 60.0 % of W (up to 30.0 % thereof may be replaced by Mo), 1.0 - 15.0 % of V and up to 20.0 % of Co, and the balance substantially of Fe, and the carbide particles in the steel is relatively large, and those having Heywood diameters 1 micron or more share at least 10 volume % of the whole carbide particles.

IPC 1-7
C22C 33/02; **C22C 38/24**

IPC 8 full level
C22C 33/02 (2006.01); **C22C 38/00** (2006.01); **C22C 38/24** (2006.01); **C22C 38/30** (2006.01)

CPC (source: EP)
C22C 33/0278 (2013.01); **C22C 38/24** (2013.01)

Cited by
US5525140A; FR2751349A1; US5969277A; US5578773A; EP0483668A1; US5252119A; US6057045A; CZ297201B6; US6861161B2; WO0191962A1; WO9302820A1; WO9302821A1; WO9803692A1; US11725264B2

Designated contracting state (EPC)
AT DE FR GB IT SE

DOCDB simple family (publication)
EP 0377307 A1 19900711; **EP 0377307 B1 19940406**; AT E103993 T1 19940415; DE 68914429 D1 19940511; DE 68914429 T2 19940728; JP 2725333 B2 19980311; JP H02175846 A 19900709

DOCDB simple family (application)
EP 89313418 A 19891221; AT 89313418 T 19891221; DE 68914429 T 19891221; JP 33007788 A 19881227