

Title (en)
HIGH-SPEED STEEL

Title (de)
SCHNELLARBEITSSTAHL

Title (fr)
ACIER A COUPE RAPIDE

Publication
EP 0885313 A1 19981223 (FR)

Application
EP 97934581 A 19970717

Priority
• FR 9701328 W 19970717
• FR 9609080 A 19960719

Abstract (en)
[origin: WO9803692A1] A steel produced by densified and agglomerated high-purity pre-alloyed powder metallurgy is disclosed. The steel comprises < 1 wt.% of manganese, < 1 wt.% of silicon, 4.50-6.45 wt.% of chromium, 4-6 wt.% of molybdenum, 6.10-6.50 wt.% of vanadium, 18.20-18.70 wt.% of tungsten, <=0.020 of sulphur, <=0.030 of phosphorus, <=100 ppm of oxygen, 5-7 wt.% of cobalt, 0.050-0.080 wt.% of nitrogen, <=0.020 of aluminium and 1.80-1.95 wt.% of carbon. The balance is iron plus the typical impurities arising during steel production. Said steel has a dispersion essentially consisting of carbides such as vanadium MC.

IPC 1-7
C22C 33/02; **C22C 38/30**

IPC 8 full level
C22C 33/02 (2006.01)

CPC (source: EP US)
C22C 33/0285 (2013.01 - EP US)

Citation (search report)
See references of WO 9803692A1

Designated contracting state (EPC)
AT BE CH DE ES GB IE IT LI NL SE

DOCDB simple family (publication)
WO 9803692 A1 19980129; AR 007934 A1 19991124; AT E207549 T1 20011115; AU 3773797 A 19980210; AU 727767 B2 20001221; BR 9706600 A 19990720; CA 2230718 A1 19980129; DE 69707651 D1 20011129; DE 69707651 T2 20020711; EP 0885313 A1 19981223; EP 0885313 B1 20011024; ES 2166096 T3 20020401; FR 2751348 A1 19980123; FR 2751348 B1 19981002; KR 20000064245 A 20001106; PL 325556 A1 19980803; US 5969277 A 19991019

DOCDB simple family (application)
FR 9701328 W 19970717; AR P970103250 A 19970718; AT 97934581 T 19970717; AU 3773797 A 19970717; BR 9706600 A 19970717; CA 2230718 A 19970717; DE 69707651 T 19970717; EP 97934581 A 19970717; ES 97934581 T 19970717; FR 9609080 A 19960719; KR 19980701979 A 19980317; PL 32555697 A 19970717; US 4343298 A 19980401