

Title (en)

A wear and corrosion resistant highly alloyed steel powder

Title (de)

Verschleiss- und Korrasionfester, hochlegierter pulvermetallurgischer Stahl

Title (fr)

Acier en poudre hautement allié résistant à l'usure et à la corrosion

Publication

EP 1785500 A1 20070516 (DE)

Application

EP 06405384 A 20060906

Priority

CH 18022005 A 20051110

Abstract (en)

A type of steel alloy is mixed in powder form of composition (%): 3.4-4.2 carbon; 20-30 chromium; 3-10 tungsten; 0-4 molybdenum; 0-6 nickel; 0.6-1.0 silicon; 0.2-0.4 manganese; 4.75-5.25 vanadium; 0.75-1.25 niobium; and balance iron and impurities. The steel in solid form is formed in a capsule by hot isostatic pressure of the powder in this composition.

IPC 8 full level

C22C 33/02 (2006.01); **C22C 37/06** (2006.01); **C22C 37/08** (2006.01); **C22C 38/56** (2006.01)

CPC (source: EP)

C22C 33/0285 (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/12** (2013.01); **C22C 38/22** (2013.01); **C22C 38/24** (2013.01);
C22C 38/36 (2013.01); **B22F 2998/10** (2013.01)

C-Set (source: EP)

B22F 2998/10 + B22F 9/082 + B22F 3/15

Citation (search report)

- [AD] US 4765836 A 19880823 - HAUSER JOHN J [US], et al & EP 0271238 A2 19880615 - CRUCIBLE MATERIALS CORP [US]
- [A] EP 0371760 A1 19900606 - NIPPON PISTON RING CO LTD [JP], et al
- [A] US 2003024614 A1 20030206 - GAVEN JAN-AKE [SE]

Cited by

EP2910663A1; US8765052B2; WO2013148674A3

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 NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1785500 A1 20070516; EP 1785500 B1 20080611; AT E398191 T1 20080715; DE 502006000902 D1 20080724; ES 2309935 T3 20081216;
PT 1785500 E 20080915

DOCDB simple family (application)

EP 06405384 A 20060906; AT 06405384 T 20060906; DE 502006000902 T 20060906; ES 06405384 T 20060906; PT 06405384 T 20060906