

Title (en)

Process for preparing a metallic material having high hardness and its use

Title (de)

Verfahren zur Herstellung eines metallischen Materials mit hoher Härte und seine Verwendung

Title (fr)

Procédé de fabrication d'un matériau métallique de grande dureté et utilisations

Publication

EP 0789086 A3 19980107 (FR)

Application

EP 97400093 A 19970116

Priority

FR 9601093 A 19960130

Abstract (en)

[origin: EP0789086A2] Manufacturing a hard, wear-resistant alloy comprises isostatically hot-pressing an alloy powder containing mainly at least iron, nickel and/or chromium, with pressure, temperature and treatment duration chosen to obtain a material with fine grains, free of fissures and hollows. Also claimed are the use of the above method to manufacture a solid piece of the alloy; and for applying a coating on a metal substrate by hot-pressing.

IPC 1-7

C22C 1/04; **C22C 33/02**; **B22F 3/15**

IPC 8 full level

G21D 1/00 (2006.01); **B22F 3/14** (2006.01); **B22F 3/15** (2006.01); **B22F 5/00** (2006.01); **C22C 1/04** (2006.01); **C22C 19/05** (2006.01); **C22C 33/02** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP)

B22F 3/15 (2013.01); **C22C 1/0433** (2013.01); **C22C 33/0285** (2013.01); **B22F 2201/10** (2013.01)

Citation (search report)

- [XY] WO 8604841 A1 19860828 - ASEA STAL AB [SE]
- [Y] FR 1425774 A 19660124 - EUTECTIC WELDING ALLOYS
- [Y] US 4401724 A 19830830 - MOSKOWITZ LARRY N [US], et al
- [Y] GB 2005305 A 19790419 - CREUSOT LOIRE
- [X] EP 0341643 A1 19891115 - SEILSTORFER GMBH & CO METALLUR [DE]
- [XY] PATENT ABSTRACTS OF JAPAN vol. 015, no. 189 (C - 0831) 15 May 1991 (1991-05-15)
- [XY] DATABASE WPI Section Ch Week 9233, Derwent World Patents Index; Class A32, AN 92-272811, XP002016817
- [XY] PATENT ABSTRACTS OF JAPAN vol. 014, no. 485 (C - 0772) 23 October 1990 (1990-10-23)
- [XY] DATABASE WPI Section Ch Week 9541, Derwent World Patents Index; Class M13, AN 95-317944, XP002016818
- [A] CHEMICAL ABSTRACTS, vol. 117, no. 2, 13 July 1992, Columbus, Ohio, US; abstract no. 12062, ITO, YUJI ET AL: "Sintered iron alloys for corrosion- and wear-resistant tools" XP002044671 & JP H03277747 A 19911209 - HITACHI METALS LTD
- [Y] PATENT ABSTRACTS OF JAPAN vol. 011, no. 297 (C - 448) 25 September 1987 (1987-09-25)

Cited by

EP0953653A1

Designated contracting state (EPC)

BE CH DE ES GB IT LI NL SE

DOCDB simple family (publication)

EP 0789086 A2 19970813; **EP 0789086 A3 19980107**; CA 2196331 A1 19970731; FR 2744046 A1 19970801; FR 2744046 B1 19980430; JP H09310132 A 19971202

DOCDB simple family (application)

EP 97400093 A 19970116; CA 2196331 A 19970129; FR 9601093 A 19960130; JP 1694597 A 19970130