

Title (en)
Method for manufacturing a coating

Title (de)
Verfahren zur Herstellung einer Beschichtung

Title (fr)
Procédé de fabrication d'un revêtement

Publication
EP 1967601 A2 20080910 (DE)

Application
EP 08002244 A 20080207

Priority
DE 102007010698 A 20070306

Abstract (en)
Coating method comprises thermal spraying simultaneously with 92 - 95 wt% of an iron alloy and 0.5 - 8 wt% of boron carbide. The alloy contains 5 - 25 wt% of chromium and 0.5 - 5 wt% of molybdenum. Independent claims are included for: (A) coatings produced using the method; (B) the coatings when applied to the contact surfaces of cylinders in light metal engine blocks; (C) and apparatus for carrying out the method comprising a spray head (2) with a feed system for two iron alloy wires (4, 5) which allow an arc to be formed, a nozzle (11), through which gas (12, 13) is fed and a feed (14) for boron carbide powder.

Abstract (de)
Eine Beschichtung wird durch thermisches Spritzen, vorzugsweise Lichtbogendrahtspritzen, mit Drähten (5, 6) aus einer Eisenlegierung, die 5 bis 25 Gew.% Chrom und 0,5 bis 5 Gew.% Molybdän enthält, gebildet, wobei der geschmolzenen Eisenlegierung in der Schmelzzone (9) Borcarbid zugeführt wird.

IPC 8 full level
C23C 4/06 (2006.01); **C22C 38/22** (2006.01); **C23C 4/10** (2006.01); **C23C 4/12** (2006.01)

CPC (source: EP)
C22C 38/22 (2013.01); **C23C 4/06** (2013.01); **C23C 4/067** (2016.01); **C23C 4/10** (2013.01); **C23C 4/131** (2016.01)

Cited by
DE102009019674B4; CN106102988A; RU2627526C2; CN112708883A; US9382868B2; US8833331B2; US9079213B2; DE102011015533A1; US10017845B2; US10221806B2; WO2015135618A1; WO2014019723A1; DE102011085324A1; WO2013060552A1; DE102011084608A1; WO2013056961A1; US10220453B2; EP2597170A1; DE102011086803A1; US8877285B2

Designated contracting state (EPC)
DE FR GB IT

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 1967601 A2 20080910; **EP 1967601 A3 20110427**; **EP 1967601 B1 20130807**; DE 102007010698 A1 20080911

DOCDB simple family (application)
EP 08002244 A 20080207; DE 102007010698 A 20070306