

Title (en)

WEARING PART CONSISTING OF A DIAMANTIFEROUS COMPOSITE

Title (de)

VERSCHLEISSTEIL AUS EINEM DIAMANTHALTIGEN VERBUNDWERKSTOFF

Title (fr)

PIECE D'USURE CONSTITUEE D'UNE MATIERE COMPOSITE CONTENANT DU DIAMANT

Publication

EP 1751320 B1 20100127 (DE)

Application

EP 05743117 A 20050530

Priority

- AT 2005000184 W 20050530
- AT 3862004 U 20040601

Abstract (en)

[origin: US2007092727A1] A wear part is formed of a diamond-containing composite material with 40 to 90% by volume of diamond grains, 0.001 to 12% by volume of carbidic phase, formed from one or more elements from the group Si, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, B, Sc, Y and lanthanides and 7 to 49% by volume of a metallic or intermetallic alloy with a liquidus temperature <1400° C., the metallic or intermetallic alloy containing the carbide-forming element or elements in dissolved or precipitated form and having a hardness at room temperature >250 HV.

IPC 8 full level

C22C 26/00 (2006.01)

CPC (source: EP KR US)

C22C 1/1021 (2023.01 - EP); **C22C 26/00** (2013.01 - EP KR US); **B22F 2998/00** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US); **C22C 1/1021** (2023.01 - US); **C22C 2026/006** (2013.01 - EP US); **Y10T 428/30** (2015.01 - EP US)

C-Set (source: EP KR US)

EP

1. **B22F 2998/00** + **C22C 1/1068**
2. **B22F 2999/00** + **C22C 1/051** + **B22F 9/04** + **B22F 3/14**
3. **B22F 2999/00** + **B22F 1/052** + **C22C 26/00**
4. **B22F 2999/00** + **C22C 26/00** + **B22F 1/052**

KR

1. **B22F 2999/00** + **C22C 26/00** + **B22F 1/052**
2. **B22F 2999/00** + **B22F 1/052** + **C22C 26/00**

US

1. **B22F 2998/00** + **C22C 1/1068**
2. **B22F 2999/00** + **C22C 1/051** + **B22F 9/04** + **B22F 3/14**
3. **B22F 2999/00** + **C22C 26/00** + **B22F 1/052**
4. **B22F 2999/00** + **B22F 1/052** + **C22C 26/00**

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2007092727 A1 20070426; US 7879129 B2 20110201; AT 7492 U1 20050425; AT E456683 T1 20100215; CN 1961090 A 20070509; CN 1961090 B 20101208; DE 502005008950 D1 20100318; EP 1751320 A1 20070214; EP 1751320 B1 20100127; IL 179677 A0 20070515; IL 179677 A 20120329; JP 2008502794 A 20080131; KR 20070026550 A 20070308; WO 2005118901 A1 20051215; ZA 200609866 B 20090527

DOCDB simple family (application)

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