

Title (en)
ODS-ALLOY OF MOLYBDENUM, SILICON AND BORON

Title (de)
ODS-MOLYBDÄN-SILIZIUM-BOR-LEGIERUNG

Title (fr)
ALLIAGE ODS MOLYBDENE-SILICIUM-BORE

Publication
EP 1664362 A1 20060607 (DE)

Application
EP 04761036 A 20040915

Priority
• AT 2004000314 W 20040915
• AT 6402003 U 20030919

Abstract (en)
[origin: US2006169369A1] A Mo-Si-B alloy has a matrix of Mo or a Mo solid solution, wherein 25% by volume to 90% by volume of molybdenum silicide and molybdenum boron silicide, optionally together with molybdenum boride, are incorporated. The alloy also contains 0.1-5% by volume of one or more oxides or mixed oxides with a vapor pressure at 1500° C. of <5x10⁻²bar in finely dispersed form. The oxide addition not only improves the hot strength but also greatly improves the ductility.

IPC 1-7
C22C 27/04; **C22C 32/00**; **C22C 1/04**; **C22C 1/10**

IPC 8 full level
C22C 27/04 (2006.01); **C22C 29/18** (2006.01); **C22C 37/04** (2006.01)

CPC (source: EP US)
C22C 27/04 (2013.01 - EP US); **C22C 29/18** (2013.01 - EP US); **C22C 37/04** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

C-Set (source: EP US)
1. **B22F 2998/10 + B22F 9/04 + B22F 3/14**
2. **B22F 2999/00 + C22C 1/1084 + B22F 3/14**

Citation (search report)
See references of WO 2005028692A1

Cited by
DE102017217082A1; DE102015209583A1; WO2019063498A1; US10865467B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2006169369 A1 20060803; **US 7806995 B2 20101005**; AT 6955 U1 20040625; AT E543921 T1 20120215; CN 1852999 A 20061025; CN 1852999 B 20120530; EP 1664362 A1 20060607; EP 1664362 B1 20120201; WO 2005028692 A1 20050331

DOCDB simple family (application)
US 38463106 A 20060320; AT 04761036 T 20040915; AT 2004000314 W 20040915; AT 6402003 U 20030919; CN 200480027085 A 20040915; EP 04761036 A 20040915