

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<SUP>-2</SUP>bar 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)  
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