

Title (en)

Method of prooducing a penetrator

Title (de)

Verfahren zur Herstellung eines Penetrators

Title (fr)

Procédé de la fabrication d'un projectile

Publication

EP 1722187 A1 20061115 (DE)

Application

EP 06008936 A 20060428

Priority

DE 102005021982 A 20050512

Abstract (en)

Producing a penetrator from a tungsten/heavy metal alloy with a high tungsten content by compressing, sintering and optionally heat-treating a tungsten-containing powder mixture and cold-working the resulting blank comprises heating the surface layer of the blank to a temperature above the recrystallization temperature of the alloy so that the surface layer recrystallizes.

IPC 8 full level

F42B 33/00 (2006.01); **B22F 5/00** (2006.01); **C21D 9/16** (2006.01); **F42B 12/06** (2006.01)

CPC (source: EP)

B22F 3/24 (2013.01); **C21D 9/16** (2013.01); **C22C 1/045** (2013.01); **F42B 12/74** (2013.01); **B22F 2003/248** (2013.01)

Citation (search report)

- [A] US 2004158969 A1 20040819 - ORTMANN HELMUT [DE], et al
- [A] FR 2821151 A1 20020823 - MANURHIN DEFENSE [FR]
- [A] US 3979234 A 19760907 - NORTHCUTT JR WALTER G, et al
- [A] US 5069869 A 19911203 - NICOLAS JEAN-CLAUDE [FR], et al
- [A] DE 3932383 A1 19910411 - RHEINMETALL GMBH [DE]
- [A] DE 2837638 A1 19790308 - BOFORS AB
- [A] ASM HANDBOOK COMMITTEE: "Metals Handbook, 8th Edition, Heat treating, Cleaning and Finishing", 1964, AMERICAN SOCIETY FOR METALS, METALS PARC, OHIO, XP002384643
- [A] A. UPADHYAYA: "TUNGSTEN HEAVY ALLOYS FOR ORDNANCE AND THERMAL MANAGEMENT APPLICATIONS", TRANS. INDIAN INST. MET., vol. 55, no. 1-2, 2002, pages 51 - 69, XP009067558

Cited by

CN107848036A; WO2009018902A1

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 LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1722187 A1 20061115; DE 102005021982 A1 20061116; DE 102005021982 B4 20070405

DOCDB simple family (application)

EP 06008936 A 20060428; DE 102005021982 A 20050512