

Title (en)
METHOD FOR PRODUCING A PENETRATOR

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES PENETRATORS

Title (fr)
PROCEDE DE FABRICATION D'UN PENETRATEUR

Publication
EP 1940574 B1 20120606 (DE)

Application
EP 06792334 A 20060930

Priority
• EP 2006009509 W 20060930
• DE 102005049748 A 20051018

Abstract (en)
[origin: WO2007045342A1] The invention relates to a method for producing a penetrator (10) from a tungsten heavy metal with a high fraction of tungsten and an outer sheath (7), which consists of a material that is more ductile in relation to the penetrator core (6). To produce a penetrator (10) of this type in a cost-effective manner, according to the invention a twin-hopper filling device, which corresponds to the dimensions of the penetrator core (6), is introduced concentrically into a compression mould (1) that corresponds to the outer dimensions of the penetrator (10). The inner pipe (3) is filled with a first tungsten powder blend with a high fraction of tungsten for producing the penetrator core (6), whilst the annular gap between the outer wall of the inner pipe and the inner wall of the compression mould (1) is filled with a second tungsten powder blend with a lower fraction of tungsten, (approximately between 85 % and 91 %), than the first powder blend. Once the inner pipe (3) has been removed from the compression mould (1), the powder blend is then compressed in the known manner to produce the penetrator (10), the compressed body is subsequently sintered and cold-formed and the penetrator slug is finally finished.

IPC 8 full level
B22F 3/00 (2006.01); **B22F 5/00** (2006.01); **B22F 7/00** (2006.01); **F42B 12/74** (2006.01); **F42B 12/76** (2006.01)

CPC (source: EP US)
B22F 3/004 (2013.01 - EP US); **B22F 7/06** (2013.01 - EP US); **F42B 12/06** (2013.01 - EP US); **F42B 12/74** (2013.01 - EP US); **F42B 12/76** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

Cited by
WO2017013314A1; US10240906B2

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

DOCDB simple family (publication)
DE 102005049748 A1 20070419; EP 1940574 A1 20080709; EP 1940574 B1 20120606; PL 1940574 T3 20121130; US 2009169411 A1 20090702; US 8580188 B2 20131112; WO 2007045342 A1 20070426

DOCDB simple family (application)
DE 102005049748 A 20051018; EP 06792334 A 20060930; EP 2006009509 W 20060930; PL 06792334 T 20060930; US 8367106 A 20060930