

Title (en)

WEAR PROTECTION LAYER AND METHOD FOR THE MANUFACTURE THEREOF

Title (de)

VERSCHLEIßSCHUTZSCHICHT UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

COUCHE DE PROTECTION CONTRE L'USURE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2350336 A2 20110803 (DE)

Application

EP 09748318 A 20091102

Priority

- EP 2009064443 W 20091102
- US 11103208 P 20081104

Abstract (en)

[origin: WO2010052184A2] The invention relates to a wear protection layer for tools such as cutters, cutting plates, injection molding tools and the like, in particular wear protection layers deposited by way of physical vapor deposition, said layers having the general composition AlNbX, where X stands for N, C, B, CN, BN, CBN, NO, CO, BO, CNO, BNO, CNCO, characterized in that the Nb fraction is less than 40 at% and/or the aluminum powder used in the manufacturing process is mixed with 10 to 50 at% zirconium, relative to the aluminum, and to a method for the manufacture of a wear protection layer.

IPC 8 full level

C23C 14/06 (2006.01); **C23C 14/32** (2006.01)

CPC (source: EP US)

C23C 14/0641 (2013.01 - EP US); **C23C 14/325** (2013.01 - EP US)

Citation (search report)

See references of WO 2010052184A2

Citation (examination)

US 2007178330 A1 20070802 - SJOLEN JACOB [SE], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010052184 A2 20100514; **WO 2010052184 A3 20100722**; CN 102224273 A 20111019; CN 102224273 B 20140924; EP 2350336 A2 20110803; JP 2012507635 A 20120329; RU 2011122206 A 20130127; RU 2528298 C2 20140910; US 2011271872 A1 20111110

DOCDB simple family (application)

EP 2009064443 W 20091102; CN 200980144130 A 20091102; EP 09748318 A 20091102; JP 2011535085 A 20091102; RU 2011122206 A 20091102; US 200913127707 A 20091102