

Title (en)

PROCESS FOR PRODUCTION OF A SCREW FOR AN EXTRUDER, AND SCREW

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER SCHNECKE FÜR EINEN EXTRUDER SOWIE SCHNECKE

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE VIS SANS FIN POUR UNE EXTRUDEUSE ET VIS SANS FIN

Publication

EP 2043837 A1 20090408 (DE)

Application

EP 07765328 A 20070606

Priority

- EP 2007055596 W 20070606
- AT 10312006 A 20060616

Abstract (en)

[origin: WO2007144303A1] At least one section of the screw (11) has a wear-protection layer (13) and at least one other section of the screw preferably has an anti-friction layer (18). In a solid rod (11'), a bed (12) for the wear-protection layer (13) is first formed, and in this the wear-protection layer (13) is then applied, and finally the interstices (14) between the screw flights (15) are formed. According to the invention, the wear-protection layer (13), for example composed of tungsten carbide, is applied by build-up welding, and the interstices (14) are formed with lateral separation (16, 16') with respect to the wear-protection layer (13). For production of the anti-friction layer, the dimension of that/those section(s) of the screw (11) where the anti-friction layer, e.g. composed of molybdenum, is to be applied is reduced below specification, while providing lateral separation (19) with respect to the wear-protection layer. The anti-friction layer is then applied in the under-dimensioned region (17). Finally, the screw (11) is brought to the specified dimension.

IPC 8 full level

B29C 48/395 (2019.01); **B29C 48/59** (2019.01)

CPC (source: EP US)

B29C 48/507 (2019.01 - EP US); **B29C 48/509** (2019.01 - EP US); **B29C 48/59** (2019.01 - EP US); **B30B 11/246** (2013.01 - EP US);
B29C 48/07 (2019.01 - EP US)

Citation (search report)

See references of WO 2007144303A1

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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2007144303 A1 20071221; AT 504385 A1 20080515; AT 504385 B1 20140315; CA 2654011 A1 20071221; CN 101466523 A 20090624;
EP 2043837 A1 20090408; JP 2009539653 A 20091119; TW 200810911 A 20080301; US 2009162470 A1 20090625

DOCDB simple family (application)

EP 2007055596 W 20070606; AT 10312006 A 20060616; CA 2654011 A 20070606; CN 200780022242 A 20070606; EP 07765328 A 20070606;
JP 2009514757 A 20070606; TW 96115443 A 20070501; US 30418307 A 20070606