

Title (en)
NEEDLE GUN

Title (de)
NADELPISTOLE

Title (fr)
PISTOLET A AIGUILLES

Publication
EP 1781426 B1 20170426 (DE)

Application
EP 05771623 A 20050824

Priority
• CH 2005000493 W 20050824
• CH 13992004 A 20040826

Abstract (en)
[origin: WO2006021121A1] The invention relates to a hammer device in the form of a needle gun. Said gun comprises a cylinder housing (1) containing a cylinder (2), in which a flying piston is displaced (3) and an anvil (4), against which the piston (3) strikes. A needle carrier (5) is located on the anvil (4), the needles (20) of said gun being held in the carrier so that they can be longitudinally displaced. To reduce the wear on the needle carrier (5) and to preserve the needle heads (21) of the needles (20), the needle carrier is configured from several layers (55, 56), at least in the vicinity of the guide plate (50). Said layers consist of alternate hard (56) and soft (55) material.

IPC 8 full level
B08B 7/02 (2006.01); **B25D 17/00** (2006.01)

CPC (source: EP US)
B08B 7/022 (2013.01 - EP US); **B25D 17/00** (2013.01 - EP US)

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)
WO 2006021121 A1 20060302; CA 2576244 A1 20060302; CN 101052479 A 20071010; CN 101052479 B 20110216; EP 1781426 A1 20070509;
EP 1781426 B1 20170426; JP 2008510628 A 20080410; JP 4624418 B2 20110202; RU 2007110817 A 20081010; RU 2370358 C2 20091020;
US 2008185164 A1 20080807; US 7861798 B2 20110104

DOCDB simple family (application)
CH 2005000493 W 20050824; CA 2576244 A 20050824; CN 200580028745 A 20050824; EP 05771623 A 20050824;
JP 2007528554 A 20050824; RU 2007110817 A 20050824; US 66123805 A 20050824