

Title (en)
Powder-actuated fastening tool

Title (de)
Pulverkraftbetriebenes Setzgerät

Title (fr)
Outil d'enfoncement actionné par poudre

Publication
EP 0638395 B1 19980708 (DE)

Application
EP 94810215 A 19940418

Priority
DE 4313504 A 19930424

Abstract (en)
[origin: DE4313504A1] The explosive-actuated driving tool has a channel (7) between a piston guide (2) for a piston (1) and a housing part (6). This channel (7) continues opposite the driving direction in a support (3) and is connected to a cartridge receptacle (4). On the driving-direction side, the channel (7) is connected via an opening (2c) in the piston guide (2) to the guide bore (2a) for the piston (1). Provided in the channel (7) is a valve device which serves to connect the regions, on the driving-direction side, of the channel (7) and the guide bore (2a) to form a storage space closed to the atmosphere. The propellant gases enclosed in this storage space are compressed by the piston (1) and serve, after completion of the driving-in operation, under expansion, to return the piston (1) to its rear starting position. A passage (3a) connects the spaces, adjoining the piston (1) opposite the driving direction, to the atmosphere so that these spaces are sufficiently vented, which on the one hand leads to unhindered driving-back of the piston (1) into its rear starting position and on the other hand allows a residual proportion of the explosive gases to escape. <IMAGE>

IPC 1-7
B25C 1/14

IPC 8 full level
B25C 1/10 (2006.01); **B25C 1/14** (2006.01)

CPC (source: EP US)
B25C 1/14 (2013.01 - EP US)

Cited by
US6123242A; CN1061584C

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)
US 5538172 A 19960723; AT E168060 T1 19980715; AU 5949894 A 19941027; AU 676008 B2 19970227; CA 2121619 A1 19941025; CA 2121619 C 20010417; CN 1045408 C 19991006; CN 1095982 A 19941207; DE 4313504 A1 19941027; DE 59406393 D1 19980813; DK 0638395 T3 19990419; EP 0638395 A1 19950215; EP 0638395 B1 19980708; ES 2118353 T3 19980916; FI 103264 B1 19990531; FI 103264 B 19990531; FI 941849 A0 19940421; FI 941849 A 19941025; HU 216486 B 19990728; HU 9401169 D0 19940728; HU T69246 A 19950828; JP H06320443 A 19941122; KR 100305976 B1 20011130; NO 304141 B1 19981102; NO 941480 D0 19940422; NO 941480 L 19941025; PL 173242 B1 19980227; TW 240189 B 19950211

DOCDB simple family (application)
US 23160494 A 19940422; AT 94810215 T 19940418; AU 5949894 A 19940415; CA 2121619 A 19940419; CN 94104976 A 19940422; DE 4313504 A 19930424; DE 59406393 T 19940418; DK 94810215 T 19940418; EP 94810215 A 19940418; ES 94810215 T 19940418; FI 941849 A 19940421; HU 9401169 A 19940422; JP 8649994 A 19940425; KR 19940008488 A 19940422; NO 941480 A 19940422; PL 30311894 A 19940422; TW 83103433 A 19940418