

Title (en)  
Powder-actuated fastener driving tool

Title (de)  
Pulverkraftbetriebenes Setzgerät

Title (fr)  
Outil de scellement actionné par poudre

Publication  
**EP 1013381 A3 20000726 (DE)**

Application  
**EP 99811162 A 19991215**

Priority  
DE 19860194 A 19981224

Abstract (en)  
[origin: EP1013381A2] The powder force operated hammer has a drive-piston (6) positioned in a hole (2) in a guide cylinder (1) and a support (3) joined to the guide cylinder. The end of the support opposite the hammering direction has a cartridge holder (10). The end of the support pointing in the hammering direction has a first active surface (4) from which protrudes a cylindrical protuberance (11) whose end side forms a second active surface (5). The drive piston has a thrust surface (13) cooperating with the first active surface. A cylindrical recess (12) holding the cylindrical protuberance extends from the thrust surface. The second and first active surfaces are connected by means of a connecting duct (14).

IPC 1-7  
**B25C 1/14**; **B25C 1/08**

IPC 8 full level  
**B25C 1/10** (2006.01); **B25C 1/08** (2006.01); **B25C 1/14** (2006.01)

CPC (source: EP US)  
**B25C 1/082** (2013.01 - EP US); **B25C 1/14** (2013.01 - EP US)

Citation (search report)

- [DY] FR 1355370 A 19640313 - IMPEX ESSEN VERTRIEB
- [Y] DE 1502154 A1 19690612 - DYNAMIT NOBEL AG
- [A] DE 1806568 A1 19700527 - TORNADO GMBH

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 1013381 A2 20000628**; **EP 1013381 A3 20000726**; **EP 1013381 B1 20030924**; AU 5950299 A 20000629; AU 756123 B2 20030102; CA 2292060 A1 20000624; CA 2292060 C 20060411; DE 19860194 A1 20000629; DE 59907110 D1 20031030; JP 2000210881 A 20000802; US 6289789 B1 20010918

DOCDB simple family (application)  
**EP 99811162 A 19991215**; AU 5950299 A 19991117; CA 2292060 A 19991209; DE 19860194 A 19981224; DE 59907110 T 19991215; JP 36435099 A 19991222; US 47001199 A 19991222