

Title (en)
POWDER-ACTUATED NAIL-SETTING TOOL

Publication
EP 0223740 A3 19880608 (DE)

Application
EP 86810504 A 19861104

Priority
DE 3540953 A 19851119

Abstract (en)
[origin: US4711385A] An explosive powder charge actuated fastening element driving device includes a driving piston mounted within a guide bore in an axially extending piston guide for displacement between a firing position and a driving position where the fastening element is driven into a receiving material. After driving a fastening element, the driving piston is returned toward the firing position by exhaust gases generated when a charge is fired. A channel laterally encloses the piston guide with a first and a second aperture, spaced apart in the axial direction, extending through the piston guide communicating between the guide bore and the channel. A blocking slide movable relative to the piston guide is located within the channel. The exhaust gases can flow through the first aperture into the channel and, when the blocking slide is displaced relative to the piston guide, entrapped in a storage space within the channel so that the exhaust gases flow through the second aperture into the guide bore and return the driving piston toward the firing position.

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B25C 1/14

IPC 8 full level
B25C 1/04 (2006.01); **B25C 1/14** (2006.01)

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

Citation (search report)
• [A] DE 1177087 B 19640827 - TORNADO GMBH
• [AD] US 3744240 A 19730710 - HENNING R, et al
• [A] DE 1907069 A1 19701022 - HAUBOLD IND NAGELGERAETE D
• [A] US 3456744 A 19690722 - ALTSCHULER SAMUEL
• [A] US 3604311 A 19710914 - MONACELLI UMBERTO
• [A] US 4030655 A 19770621 - ROTHFUSS ROBERT G, et al
• [A] US 3715069 A 19730206 - O CONNOR R
• [A] GB 2055429 A 19810304 - VNI PK INST MEKH RUCH STROIT M

Cited by
EP0621110A1; EP0638395A1; EP0798084A1; FR2746690A1; DE19617672C1; US6085958A; EP0805003A3; DE19617671C1; US6123242A; EP0805002A3; EP0780195A1; US5767434A; CN1061584C; US6824035B1

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