(19) Europäisches Patentamt
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(11) **EP 1 350 603 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
17.10.2007 Bulletin 2007/42

(43) Date of publication A2:
08.10.2003 Bulletin 2003/41

(21) Application number: **03252175.9**

(22) Date of filing: **07.04.2003**

(51) Int Cl.:
B25C 1/00 *(2006.01)* ***B25C 1/04*** *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR
Designated Extension States:
AL LT LV MK

(30) Priority: **05.04.2002 US 369802 P**
05.04.2002 US 369884 P

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(54) **Fastener driving device**

(57) A fastener driving device (10) includes a housing containing a chamber (20) for storing compressed air a cylinder structure (34) disposed within the housing, a piston (26) movably disposed within the cylinder, a driver (33) connected to the piston, a main valve (38) cooperable with the cylinder structure and movable between an open position and a closed position. The main valve (38) in its open position allows air to move the piston through a drive stroke. The fastener driving device also includes a trigger valve (36) operable between first and second positions. The trigger valve in its first position communicates air pressure from the chamber (20) to the main valve (38) through a signal passageway (43) so as to retain the main valve in a closed position. The trigger valve in its second position allows the air to be exhausted to atmosphere through the signal passageway (43) to permit the main valve to open. The cylinder (34) and the signal passageway (43) comprise an integrally molded structure.

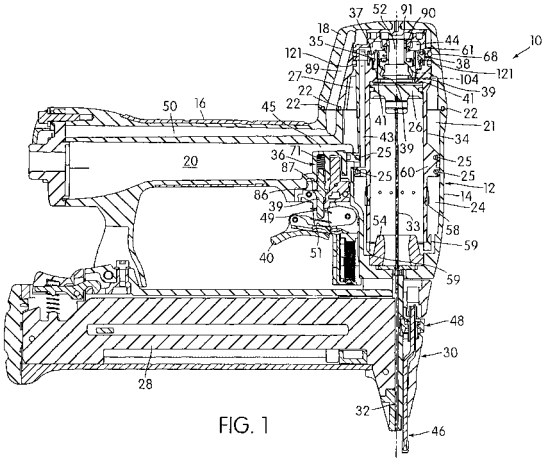


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	US 4 252 175 A (WHIPPLE ROGER B) 24 February 1981 (1981-02-24) * columns 1-5; figures *	1-12	
Y	JP 54 084118 A (FUJI HEAVY IND LTD) 4 July 1979 (1979-07-04) * abstract; figures *	1-12	
Y	FR 2 661 353 A1 (SOFRAGRAF IND [FR]) 31 October 1991 (1991-10-31) * pages 4-8; figures *	1-12	
A	JP 05 312101 A (MAZDA MOTOR) 22 November 1993 (1993-11-22) * abstract; figures *	1-12	
A	GB 2 236 556 A (HONDA MOTOR CO LTD [JP]) 10 April 1991 (1991-04-10) * pages 1-3; figures *	1-12	TECHNICAL FIELDS SEARCHED (IPC) B25C F02F

~~The present search report has been drawn up for all claims~~

Place of search	Date of completion of the search	Examiner
The Hague	15 June 2007	David, Radu

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-12

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LACK OF UNITY OF INVENTION
SHEET B

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-12

a cylinder structure and a signal passageway comprising an integrally formed structure

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2. claim: 13

a fastening tool with a main valve formed at least in part of flexible material

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 03 25 2175

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-06-2007

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82