



(11)

EP 2 255 927 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
28.03.2012 Bulletin 2012/13

(51) Int Cl.:
B25B 13/08 (2006.01) **B25B 13/46** (2006.01)

(43) Date of publication A2:
01.12.2010 Bulletin 2010/48

(21) Application number: 10153675.3

(22) Date of filing: 16.02.2010

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL
PT RO SE SI SK SM TR
Designated Extension States:
AL BA RS

(30) Priority: 07.05.2009 EP 09159662

(71) Applicant: **Danaher Tool Limited, Taiwan Branch**
Taichung 407 (TW)

(72) Inventors:

- **Tuan Mu, Hsien-Chung**
407, Taichung (TW)
- **Li, Chung-Sung**
407, Taichung (TW)

(74) Representative: **2K Patentanwälte Blasberg**
Kewitz & Reichel
Partnerschaft
Corneliusstraße 18
60325 Frankfurt am Main (DE)

(54) Ratchetable open-ended wrench

(57) The invention discloses a ratchetable open-ended wrench for turning a workpiece (W) having a drive end with at least one pair of opposed contact edges (WS), comprising: a handle (H) with a first end; a wrench head (100) including a base portion (200); a first jaw (110) extending outwardly from the base portion (200) and including a first driving wall (114) disposed in a first plane; a second jaw (120) extending outwardly from the base portion (200) of the wrench head 100 such that the first and the second jaws define a drive opening configured to receive the drive end of the fastener (W), the second jaw

including a rear-end wall (127) disposed in a second plane adjacent the base portion (200); and an auxiliary jaw (140) including a driving surface (143) and being slidably received in the second jaw (120) such that the driving surface (143) of the auxiliary jaw (140) extends outwardly into the drive opening and the rear-end wall (127) is disposed between the auxiliary jaw (140) and the base portion (200), wherein the drive end of the fastener (W) is slidably receivable in the drive opening of the wrench head (100) such that the fastener (W) can be rotated in a first direction by the first driving wall (114) and the rear-end wall (127).

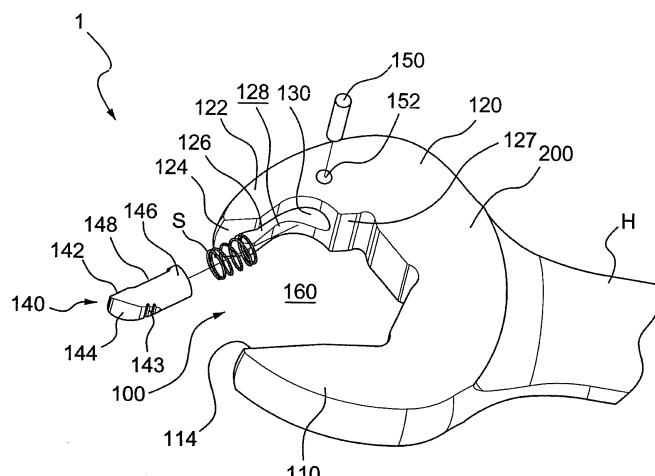


FIG. 1A



EUROPEAN SEARCH REPORT

Application Number
EP 10 15 3675

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
A	US 2 652 735 A (WILDER GLENN W) 22 September 1953 (1953-09-22) * the whole document * -----	1	INV. B25B13/08 B25B13/46
A	DE 102 04 805 A1 (FELDHAUS MARKUS [DE]) 14 August 2003 (2003-08-14) * the whole document * -----	1	
A	DE 20 2005 019936 U1 (CHANG HUI LING [TW]) 16 February 2006 (2006-02-16) * the whole document * -----	1	
A	US 2 879 681 A (BLASDELL HOWARD C) 31 March 1959 (1959-03-31) * the whole document * -----	1	
A,D	US 7 077 035 B1 (HUANG PING WEN [TW]) 18 July 2006 (2006-07-18) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B25B
The present search report has been drawn up for all claims			
1	Place of search Munich	Date of completion of the search 16 February 2012	Examiner Kühn, Thomas
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			

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 10 15 3675

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.

16-02-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2652735	A	22-09-1953	NONE	
DE 10204805	A1	14-08-2003	NONE	
DE 202005019936	U1	16-02-2006	NONE	
US 2879681	A	31-03-1959	NONE	
US 7077035	B1	18-07-2006	NONE	

EPO FORM P0459

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