



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
02.04.2003 Bulletin 2003/14

(51) Int Cl.7: **B25B 13/46**

(43) Date of publication A2:
25.07.2001 Bulletin 2001/30

(21) Application number: **00126902.6**

(22) Date of filing: **08.12.2000**

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

(71) Applicant: **Hu, Bobby
Taichung (TW)**

(72) Inventor: **Hu, Bobby
Taichung (TW)**

(30) Priority: **16.12.1999 US 464563
13.03.2000 US 523625**

(74) Representative:
**LOUIS, PÖHLAU, LOHRENTZ & SEGETH
Postfach 3055
90014 Nürnberg (DE)**

(54) **Reversible ratcheting tool with a smaller head**

(57) A ratcheting tool includes a handle (11) and a head (12) with a compartment (13). A drive member (20) includes a first end (22), a second end, and a gear wheel (21) formed between the first end and the second end. The gear wheel is rotatably mounted in the compartment and includes a toothed outer periphery. A pawl (30) is mounted in the compartment and includes a toothed

side facing the gear wheel teeth (211). A reversing plate (50) is mounted to the first end (22) of the drive member and pivotable about the rotational axis of the gear wheel (21) between a first position and a second position. The reversing plate (50) is operably connected to the pawl (30) for moving the pawl between a first ratcheting position and a second ratcheting position.

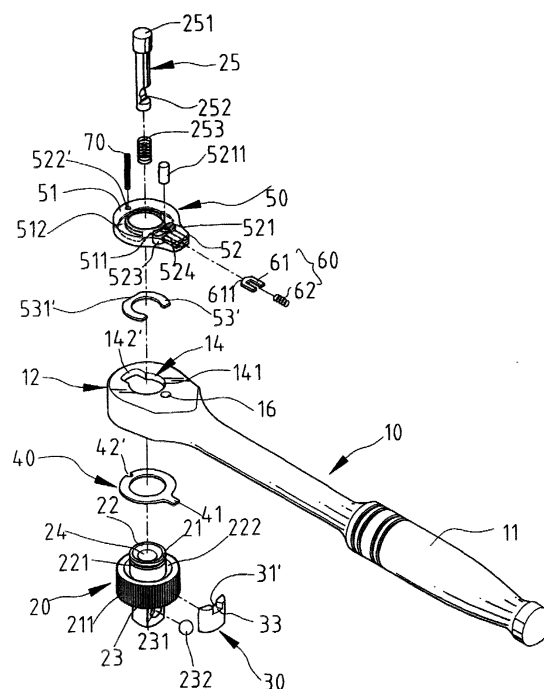


Fig. 10



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 12 6902

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 299 07 467 U (HSIEH) 29 July 1999 (1999-07-29) * page 4, line 6 - line 9 * * page 4, line 29 - page 5, line 23; figures * ---	1-5,8,9, 11,20, 21,23, 24,26	B25B13/46
X	US 3 393 780 A (KILNESS LUTHER E) 23 July 1968 (1968-07-23) * column 2, line 38 - column 4, line 50; figures 1-3 *	1,2,4,5, 7-9,24 3	
A	---		
X	DE 299 10 932 U (HUANG YUNG HSU) 26 August 1999 (1999-08-26) * the whole document *	1,4,7 2,3	
A	---		
A	US 3 269 496 A (KILNESS LUTHER E) 30 August 1966 (1966-08-30) * column 3, line 10 - line 44; figures * -----	1-3,26	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B25B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 February 2003	Examiner Majerus, H
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			

EPO FORM 1503 03/02 (P04C01)

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

EP 00 12 6902

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.

07-02-2003

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
DE	29907467	U	29-07-1999	DE 29907467 U1	29-07-1999
US	3393780	A	23-07-1968	NONE	
DE	29910932	U	26-08-1999	DE 29910932 U1	26-08-1999
US	3269496	A	30-08-1966	NONE	

EPO FORM P0489

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