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(54) **Router**

(57) A router (20) including a base (24) for supporting the router on a work piece (W) surface, a motor housing (28) supported by the base (24), and a motor supported by the housing and operable to drive a tool element. The router also includes a hand grip (48) attachable to one of the base (24) and the housing (28). The hand grip (48) may be contoured to fit a hand of an operator and may be at least partially formed of an elastomeric material. The router (20) may also include a fixing assembly (92) for fixing the housing in a position relative to the base (24), the fixing assembly (92) including a clamping member for applying a clamping force to the housing (28) to fix the housing in a position relative to the base (24), and

an actuator for moving the clamping member. The router may also include an adjustment mechanism (224) for adjusting the position of the housing (28) relative to the base (24), the adjustment mechanism (224) including a coarse adjustment assembly for making relatively large changes in the position of the housing (28), and a fine adjustment assembly for making relatively small changes to the position of the housing. The adjustment mechanism (224) may be operated when the router is supported in an inverted position below a work table. A router case having a removable molded base plate may be provided to support the router on a surface.

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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)
Y	US 5 902 080 A (KOPRAS) 11 May 1999 (1999-05-11) * column 3, lines 47-52; figures *	1-8, 15-21	INV. B27C5/10 B25F5/02 B25H3/00
X	-----	22	
Y	US 5 353 474 A (GOOD) 11 October 1994 (1994-10-11) * abstract * * column 4, lines 41-67 *	1-8, 15-21	
X	* column 8, lines 17,18; figures *	22	
Y	DE 41 19 325 A (LICENTIA) 17 December 1992 (1992-12-17) * column 3, lines 59-66; claim 1; figures 1,2 *	5,6	
Y	----- US 5 265 657 A (MATSUMOTO) 30 November 1993 (1993-11-30) * column 1, lines 8-16; figure 1 *	3	
X	-----	15,18	TECHNICAL FIELDS SEARCHED (IPC) B27C B25F B25H
A	-----	1,2,4	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 August 2006	Examiner Matzdorf, Udo
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:
1-8, 15-22



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: 1-8, 15-22

A router having a hand grip

2. claims: 9-11

A router having a fixing assembly including a cam

3. claims: 12-14

A router comprising an adjustment mechanism including a shaft

4. claim: 23

A combination for using a router in an inverted position

5. claims: 24-29

A combination for supporting the router

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

EP 06 07 6432

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.

16-08-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5902080	A	11-05-1999	NONE	

US 5353474	A	11-10-1994	NONE	

DE 4119325	A	17-12-1992	NONE	

US 5265657	A	30-11-1993	CN 1079686 A	22-12-1993
			JP 2827746 B2	25-11-1998
			JP 5337902 A	21-12-1993

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