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(72) Inventor: **Kihara, Hiroyuki**  
**Narashino-shi, Chiba (JP)**

(74) Representative: **Sturt, Clifford Mark et al**  
**Miller Sturt Kenyon**  
**9 John Street**  
**London WC1N 2ES (GB)**

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(71) Applicant: **SEIKO SEIKI KABUSHIKI KAISHA**  
**Narashino-shi Chiba (JP)**

(54) **Groove grinding spindle**

(57) A wheel spindle 2 to which a grinding wheel 1 is attached, is connected to a driving shaft 5 by bevel gears 6 and 7 and the driving shaft 5 is connected to an output shaft 4 of a motor 3. One end of the drive shaft 5 is axially supported by a needle bearing 8 and the other end is axially supported by angular bearings 9 and 10. The angular bearings 9 and 10 are axially supported

by a bearing holder 18, the bearing holder 18 is slidably fitted to a fitting recess 21 and adjusting screws 25 and 26 are attached to a flange 22 of the bearing holder 18. Accordingly, by adjusting the adjusting screws 25 and 26, the drive shaft 5 can be positioned by being moved in the axial direction thereof and, after positioning, the bearing holder 18 is fixed to a spindle main body 12 by a set screw 28.

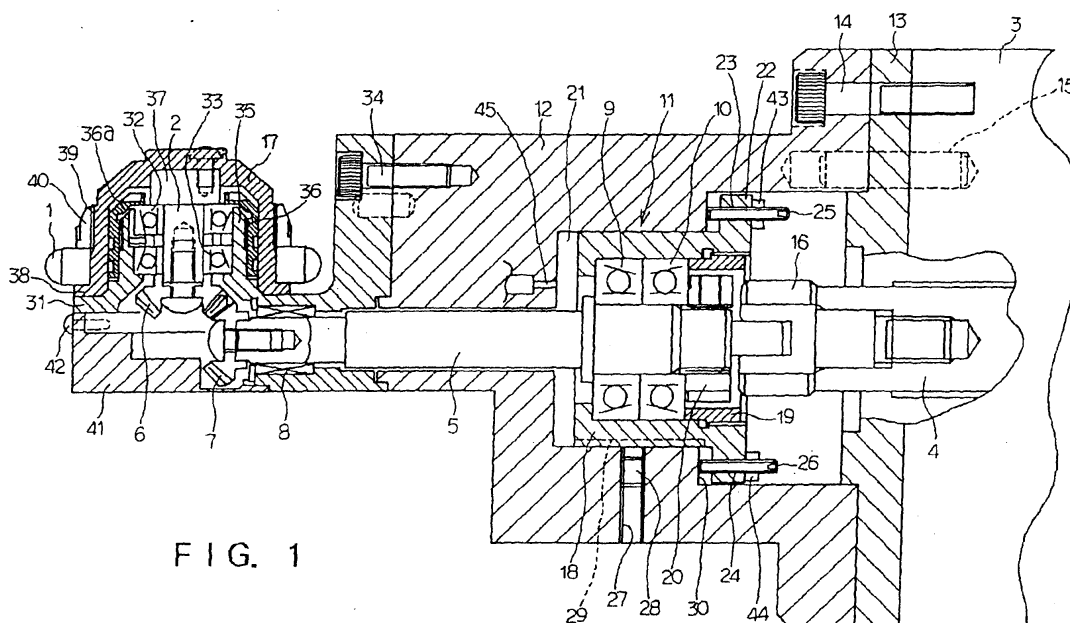


FIG. 1

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## EUROPEAN SEARCH REPORT

Application Number  
EP 98 30 0450

| 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.6) |
| Y  | US 4 735 019 A (WIEDERKEHR) 5 April 1988<br>* column 2, line 48 - line 65; figure 2 *<br>---      | 1,2   | B24B19/02<br>B24B41/04<br>B23Q5/56           |
| Y  | EP 0 548 717 A (BOSCH GMBH ROBERT)<br>30 June 1993<br>* the whole document *<br>---               | 1,2   |  |
| A  | US 4 083 152 A (LORENZ) 11 April 1978<br>* column 3, line 29 - line 49; figures 2,3<br>*<br>----- | 1   |  |
|  |   |   | TECHNICAL FIELDS SEARCHED (Int.Cl.6)         |
|  |   |   | B24B<br>B23Q                                 |
| The present search report has been drawn up for all claims   |   |   |  |
| Place of search<br>THE HAGUE   |   | Date of completion of the search<br>1 December 1998 | Examiner<br>Garella, M                       |
| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |   |   |  |

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