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Publication number:

0 510 828 A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **92303049.8**

(51) Int. Cl.⁵: **B24B 41/04**, B24B 13/00,
B24B 55/02

(22) Date of filing: **07.04.92**

(30) Priority: **25.04.91 US 691364**

(43) Date of publication of application:
28.10.92 Bulletin 92/44

(84) Designated Contracting States:
DE ES FR GB IT

(88) Date of deferred publication of the search report:
03.03.93 Bulletin 93/09

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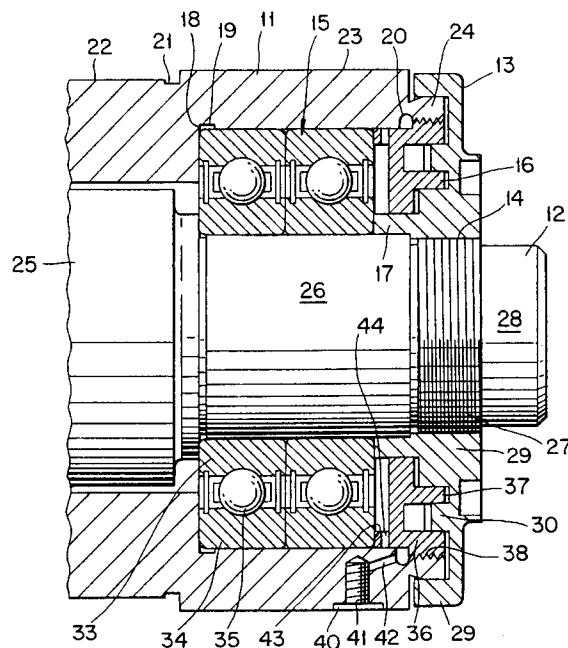
(54) **Apparatus for cutting and shaping material.**

(57) Apparatus for cutting and shaping material which includes at least one bearing arrangement (15). The bearing arrangement comprising:

- a hollow sleeve member (11);
- a rotatable shaft (12) disposed in the hollow sleeve member;
- a bearing race assembly (15) disposed between the hollow sleeve member and the rotatable shaft to facilitate the relative rotation therebetween; and
- an end cap (13) disposed to close off the hollow sleeve member and enclose the bearing arrangement.

Fluid is injected into the internal environment of the hollow sleeve member and caused to flow, at least in part, between the components and out of the bearing arrangement so as to prevent the ingress of unwanted material into the arrangement.

Fig. 3



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EUROPEAN SEARCH REPORT

Application Number

EP 92 30 3049

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.5)
X	DE-A-2 714 143 (SEIKO SEIKI K.K.)	1,2	B24B41/04
Y	* page 4, last paragraph - page 5, paragraph 3; figure 1 *	4,5	B24B13/00
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Y	EP-A-0 131 743 (COBURN INC.)	4,5	
	* page 5, line 22 - line 27; figure 1 *		

			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B24B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 NOVEMBER 1992	Examiner VIBERG S.O.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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