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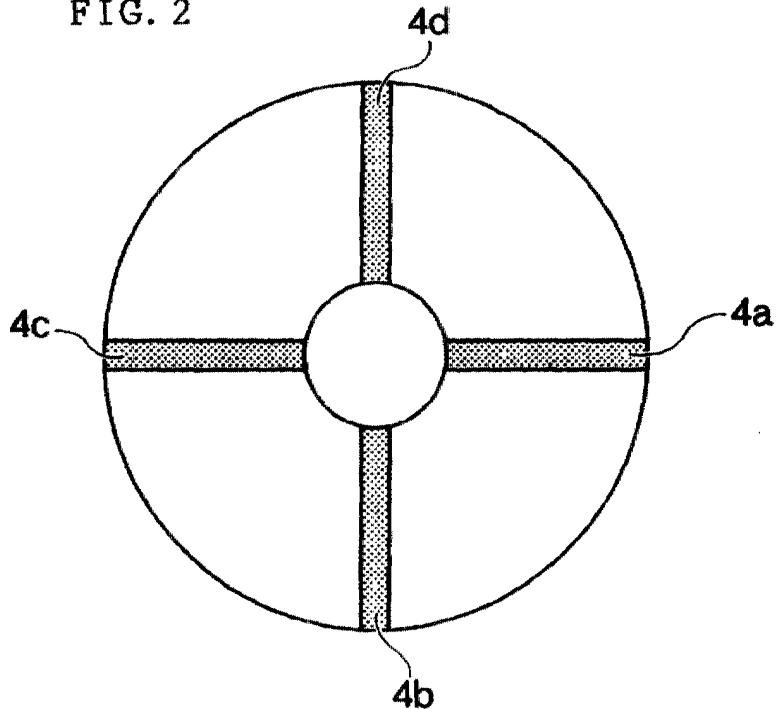
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(54) A polishing machine

(57) The present invention is a polishing machine, comprising a rotatable metallic platen whose surface is covered by the plural number of polishing pad, on the position of the surface of said metallic platen corresponding to the jointing lines of said polishing pads, the

grooves are engraved, and the filling material which is different from the material composing the platen is inserted into said grooves. The desirable substance to be inserted into said grooves is stainless steel, synthetic resin or ceramics.

FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 99 10 9243

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)																		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim																			
A	US 3 164 855 A (HENCKEN HAROLD G) 12 January 1965 (1965-01-12) * figures * ---	1,2	B24B37/04 B24D13/12 B24D13/14																		
A	US 3 921 342 A (DAY LAWRENCE) 25 November 1975 (1975-11-25) * column 2, line 39-42 * ---	1,2																			
A	US 5 743 788 A (VANELL JAMES F) 28 April 1998 (1998-04-28) * abstract * ---																				
A	US 5 534 106 A (YANO HIROYUKI ET AL) 9 July 1996 (1996-07-09) * figures 3A-3D * -----																				
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)																		
			B24B B24D H01L																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 33%;">Examiner</td> </tr> <tr> <td>MUNICH</td> <td>10 July 2002</td> <td>Gelder, K</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	MUNICH	10 July 2002	Gelder, K												
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10-07-2002

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 3164855	A	12-01-1965	NONE			
US 3921342	A	25-11-1975	CA	977970 A1		18-11-1975
US 5743788	A	28-04-1998	CN EP JP	1184019 A 0850725 A2 10156709 A		10-06-1998 01-07-1998 16-06-1998
US 5534106	A	09-07-1996	JP JP US	3145010 B2 8172064 A 5593537 A		12-03-2001 02-07-1996 14-01-1997