

①²

**EUROPEAN PATENT APPLICATION**

②¹ Application number: **82105371.7**

⑤¹ Int. Cl.³: **B 24 D 3/28, B 24 D 3/34**

②² Date of filing: **18.06.82**

③⁰ Priority: **10.08.81 US 291205**

⑦¹ Applicant: **NORTON COMPANY, 1 New Bond Street,  
Worcester Massachusetts 01606 (US)**

④³ Date of publication of application: **16.02.83**  
**Bulletin 83/7**

⑦² Inventor: **Ibrahim, Mohamed Mostafa, 28 Ashley Drive,  
Ballston Lake New York (US)**

⑧⁴ Designated Contracting States: **AT CH DE FR GB IT LI  
SE**

⑧⁸ Date of deferred publication of search  
report: **05.09.84 Bulletin 84/36**

⑦⁴ Representative: **Baillie, Iain Cameron et al, c/o Ladas &  
Parry Isartorplatz 5, D-8000 München 2 (DE)**

⑤⁴ **Coated abrasive.**

⑤⁷ A coated abrasive of improved resistance to "loading" comprising a flexible backing, a plurality of abrasive grit particles dispersed over the area of at least one surface of said backing, and at least one layer of adhesive bond material adhering said abrasive grit particles to each other and to said backing, characterized by the fact that the outermost layer of said adhesive bond material comprises:

(a) animal glue, or a cured amino resin, or a mixture thereof in an amount of at least 40% by weight of the total adhesive bond material, exclusive of any filler; and

(b) at least 0.74 grams per square meter of an additive which is

(1) a mono-, di-, and tri-organyl ester of orthophosphoric acid,

(2) a salt of a mono-, di-, and tri-organyl ester of orthophosphoric acid with an amine,

(3) a tetraorganylammonium salt, or

(4) a soluble mixture thereof.

Best results are obtained with a sizer adhesive of amino resin containing phosphate esters or their amine salts as additive.

**EP 0 071 723 A3**



European Patent  
Office

# EUROPEAN SEARCH REPORT

0071723 Application number

EP 82 10 5371

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. <sup>3</sup> )
Y	DE-A-1 646 824 (NORDDEUTSCHE SCHLEIFMITTEL-INDUSTRIE CHRISTIANSEN & CO.) * Claims; page 2, example *	1,3,6	B 24 D 3/34 B 24 D 3/28
Y	DE-A-2 226 744 (VEREINIGTE SCHMIRGEL- UND MASCHINEN-FABRIKEN AG) * Claim; page 2, paragraph 1 *	1,3,6	
Y	FR-A-2 330 504 (ET. G. DURRSCHMIDT) * Claims; page 2, line 37 - page 3, line 3; page 2, lines 23-26 *	1,3,6	
Y	US-A-1 591 001 (H. JOSEPH) * Claims; page 1, lines 86-96 *	1,3,6	
Y	BE-A- 494 833 (UTENSILI-SMERIGLI-ABRASIVI) * Abstract; page 2, lines 13-52; page 1, lines 1-6 *	1,3,6	
Y	DE-A-2 720 829 (C. HILZINGER) * Claims; page 8, paragraph 2 *	1,3,6	
Y,D	US-A-2 983 593 (B.W. DUKE) * Claims *	1,3,6	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23-05-1984	Examiner VANHECKE H.
<b>CATEGORY OF CITED DOCUMENTS</b>			
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	



DOCUMENTS CONSIDERED TO BE RELEVANT			Page 2
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
A	* Column 2, lines 23-56 * ---	4,5	
Y	DE-C- 818 863 (BEHR-MANNING) * Claims; page 2, lines 67-115; examples; figures * -----	1,3,6	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23-05-1984	Examiner VANHECKE H.
<b>CATEGORY OF CITED DOCUMENTS</b>			
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	