

(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: **85303103.7**

(51) Int. Cl.³: **B 24 D 3/00**
B 24 D 11/00

(22) Date of filing: **01.05.85**

(30) Priority: **09.05.84 US 608480**
09.05.84 US 608481

(43) Date of publication of application:
21.11.85 Bulletin 85/47

(68) Date of deferred publication of search report: **25.11.87**

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

(71) Applicant: **MINNESOTA MINING AND
MANUFACTURING COMPANY**
3M Center, P.O. Box 33427
St. Paul, Minnesota 55133-3427(US)

(72) Inventor: **Broberg, David E. c/o Minnesota Mining and
Manufacturing Company 2501 Hudson Road**
P.O. Box 33427 St. Paul Minnesota 55133(US)

(72) Inventor: **Larkey, Thomas W. c/o Minnesota Mining and
Manufacturing Company 2501 Hudson Road**
P.O. Box 33427 St. Paul Minnesota 55133(US)

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

(54) **Coated abrasive product incorporating selective mineral substitution.**

(57) Replacement of all or most of the coarse mineral in a coated abrasive product by a superior (and typically more expensive) mineral improves abrading performance significantly more than would be predicted. In some cases the performance is superior to that of products made with either mineral alone. Typically 5% to 30% of the total mineral weight is made up of the superior mineral.



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 4)
X,D	US-A-3 867 795 (HOWARD) * Column 9, line 60 - column 10, line 41 *	1,3	B 24 D 3/00 B 24 D 11/00
A	---	8	
A	SOVIET INVENTIONS ILLUSTRATED, section Chemical, week 8450, 30th January 1985, Derwent Publications Ltd, London, GB; & SU-A-1 085 800 (RADZIVINOVICH) 15-04-1984 * Page 61, no. 84-310707/50 *	1,3,4	
A	---	1,3	
A	FR-A- 363 751 (PAULS) * Whole document *	1	TECHNICAL FIELDS SEARCHED (Int Cl 4) B 24 D C 09 K
A	---	1,2	
A,D	FR-A-1 286 578 (THE CARBORUNDUM CO.) * Page 1, column 1 *	5,9	

	US-A-4 314 827 (LEITHEISER et al.) * Claim 14 *		

The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 15-09-1987	Examiner ASHLEY G.W.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

