

Title (en)  
COATED ABRASIVE SUITABLE FOR USE AS A LAPPING MATERIAL

Publication  
**EP 0227394 B1 19910502 (EN)**

Application  
**EP 86309714 A 19861212**

Priority  
US 80900385 A 19851216

Abstract (en)  
[origin: EP0227394A2] This invention relates to novel coated abrasives, and, in particular, to a lapping material in sheet form. The earliest methods of lapping employed particulate abrasive materials suspended in a liquid vehicle to form a slurry. The suspension was worked against the surface of the workpiece until the desired finish was attained. More recently, lapping materials in pad or sheet form have been developed. U.S. Patent 4,288,233 describes lapping pads for ophthalmic lenses. While the lapping material of this invention is useful, the components thereof, i.e. diamonds, and the method of making it, i.e. metal plating, are expensive. Furthermore the lapping materials described therein are not flexible. This invention involves a coated abrasive comprising a backing and abrasive grain adhered to said backing by means of a binder. The binder is prepared from a composition that is curable by free-radical polymerization. The composition contains abrasive grain suspended therein at the time the composition is coated onto the backing. The abrasive exhibits high endurance for extended periods of use. The coated abrasive is prepared by a method comprising the steps of: (a) providing a coatable composition comprising a binder curable by free-radical polymerization, said composition having lapping size abrasive grains suspended therein, (b) coating said composition on a backing, and (c) curing said composition by means of free-radical polymerization.

IPC 1-7  
**B24D 3/28**

IPC 8 full level  
**B24B 37/00** (2006.01); **B24D 3/00** (2006.01); **B24D 3/28** (2006.01); **B24D 11/00** (2006.01)

CPC (source: EP KR)  
**B24D 3/001** (2013.01 - EP); **B24D 3/28** (2013.01 - EP KR); **B24D 11/00** (2013.01 - EP)

Cited by  
US5938801A; EP0747455A1; EP0396150A3; US5271964A; EP0520643A3; US5879222A; US5823855A; CN110549258A; WO9726114A1; WO9415751A1; EP0321230B1

Designated contracting state (EPC)  
CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**EP 0227394 A2 19870701**; **EP 0227394 A3 19871111**; **EP 0227394 B1 19910502**; CA 1263240 A 19891128; DE 3679048 D1 19910606; JP 2655570 B2 19970924; JP S62157770 A 19870713; KR 870005750 A 19870707; KR 950001983 B1 19950308

DOCDB simple family (application)  
**EP 86309714 A 19861212**; CA 523191 A 19861118; DE 3679048 T 19861212; JP 29859186 A 19861215; KR 860010720 A 19861215