PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
B24D 11/00

A1

(11) International Publication Number: WO 95/27595

(43) International Publication Date: 19 October 1995 (19.10.95)

(21) International Application Number: PCT/US95/04072

(22) International Filing Date: 30 March 1995 (30.03.95)

(30) Priority Data:
08/224,768 8 April 1994 (08.04.94) US

(71) Applicant: RODEL, INC. [US/US]; 451 Bellevue Road, Newark, DE 19713 (US).

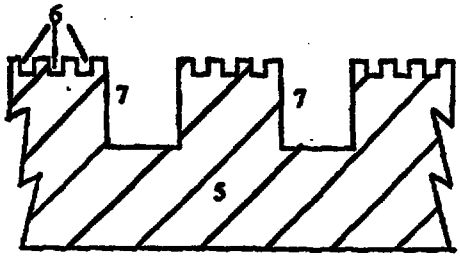
(72) Inventors: COOK, Lee, Melbourne; 190 Bryson Road, Steelville, PA 19310 (US). ROBERTS, John, V., H.; 17 West Country Lane, Newark, DE 19702 (US). JENKINS, Charles, William; 9 Christina Woods Court, Newark, DE 19702 (US). PILLAI, Raj, Raghav; 1402 Chelmsford Circle, Newark, DE 19713 (US).

(74) Agent: BENSON, Kenneth, A.; P.O. Box 191, Chatham, PA 19318 (US).

(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.
With amended claims.

(54) Title: IMPROVED POLISHING PADS AND METHODS FOR THEIR USE



(57) Abstract

An improved polishing pad is provided comprising a solid uniform polymer sheet (5) having no intrinsic ability to absorb or transport slurry particles having during use a surface texture or pattern which has both large (7) and small (6) flow channels present simultaneously which permit the transport of slurry across the surface of the polishing pad, where said channels are not part of the materials structure but are mechanically produced upon the pad surface. In a preferred version of the invention, the pad texture consists of a macrotexture produced prior to use and a microtexture which is produced by abrasion by a multiplicity of small abrasive points at a regular selected interval during the use of the pad.