



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A61K 6/083, 6/00, C07C 69/54	A1	(11) International Publication Number: WO 97/29732 (43) International Publication Date: 21 August 1997 (21.08.97)
(21) International Application Number: PCT/US97/02342 (22) International Filing Date: 13 February 1997 (13.02.97) (30) Priority Data: 08/603,957 15 February 1996 (15.02.96) US (71) Applicant: DENTSPLY INTERNATIONAL INC. [US/US]; 570 West College Avenue, P.O. Box 872, York, PA 17405-0872 (US). (72) Inventors: HAMMESFAHR, Paul D.; 605 Quail Run, Wyoming, DE 19934 (US). LU, Kewang; 696 Independence Boulevard, Dover, DE 19901 (US). SILVER, Paul A.; 4607 Little Rock Drive, Wilmington, DE 19802 (US). (74) Agents: LOVERCHECK, Dale, R. et al.; Dentsply International Inc., 570 West College Avenue, P.O. Box 872, York, PA 17405-0872 (US).		(81) Designated States: AU, BR, CA, CN, JP, MX, NO, SG European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: DENTAL COMPOUNDS, COMPOSITIONS AND PRODUCTS (57) Abstract The invention provides polymerizable dental, compounds, compositions, including the compounds and products for mixing the compositions and methods of using the compositions. Aryl acid compounds are provided in accordance with the invention. The compositions include at least one polymerizable aryl acid compound, an effective amount of a polymerization initiator, and at least 10 percent by weight of ceramic, metal and/or metal oxide filler particles having a particle size less than 500 microns. The dental products of the invention include a polymerizable composition in an enclosure having at least two chambers separated by a wall adapted to be ruptured prior to or during mixing of the composition. Compositions of the invention are preferred for use in these enclosures. Core build up material including a polymerizable acid containing compound is used to support dental crowns and adhere them to teeth in accordance with the invention.		