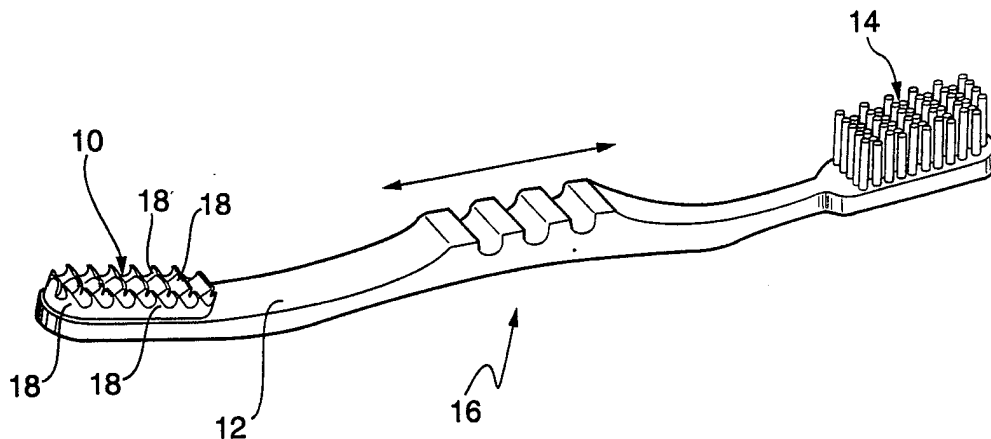




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US97/15083</p> <p>(22) International Filing Date: 27 August 1997 (27.08.97)</p> <p>(30) Priority Data: 08/705,271 29 August 1996 (29.08.96) US</p> <p>(71)(72) Applicant and Inventor: TVERAS, Rimvydas [LT/US]; 8945 West 103rd Street, Palos Hills, IL 60465 (US).</p> <p>(74) Agents: MOTTIER, Charles, H. et al.; Leydig, Voit &amp; Mayer, Ltd., Suite 4900, Two Prudential Plaza, 180 North Stetson, Chicago, IL 60601-6780 (US).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 30 April 1998 (30.04.98)</p>

(54) Title: WIPING ELEMENT FOR AN ORAL HYGIENE DEVICE, WINDOW WIPER, OR THE LIKE



## (57) Abstract

A wiping or scraping device (10) particularly for cleaning a human tongue, is provided having one or more wiping teeth (18) or wiping elements. Each tooth or element has at least one scoop-like side (20) which terminates at a wiping edge or ridge in an undercutting fashion. Various embodiments are provided for providing bi-directional or planar directional wiping or cleaning action. For example, embodiments of the invention include wiping devices, linear wiping elements or circular wiping elements with outwardly directed and/or inwardly directed annular wiping edges. The wiping device may include a plurality of wiping elements arranged in a row or array. Embodiments are provided wherein the wiping device is configured for use as a windshield wiper or squeegee.

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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US97/15083

A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 606/161

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 15/111, 187, 188, 236.01, 245; 606/161

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,032,082 A (HERRERA) 16 July 1991, entire document.	1, 2, 4-6, 13, 14, 18 ----- 7, 17, 19, 20
X --- Y	US 5,546,625 A (MEALEY, SR.) 20 August, 1996, entire document	23-30, 33, 35, 38, 44, 49 ----- 31, 32, 34
Y	US 4,455,704 A WILLIAMS) 26 June 1984, entire document.	7, 17, 19, 20, 31

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Date of the actual completion of the international search

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International application No.  
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**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,528,793 A (SCHBOT) 25 June 1996 entire document.	23