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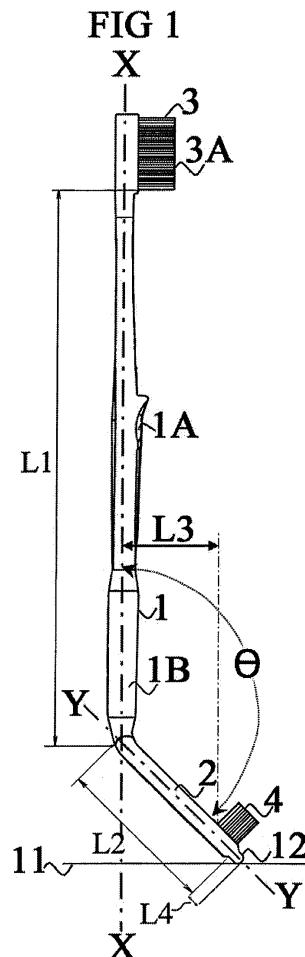
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(54) Improvements in the design of toothbrushes

(57) A toothbrush is formed with an angled extension (2) at one end carrying a small brush for cleaning lingual tooth surfaces. By designing the geometry of the brush handle (1) and extension (2) so that they define an angle of between 100 and 150 degrees and so that the brush is displaced from the handle axis by at least 20mm, it becomes possible to clean effectively the surfaces which are rarely cleaned well using a conventional brush. Other tooth surfaces are cleaned using a conventional brush (3) at the opposite end of the handle.



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EUROPEAN SEARCH REPORT

Application Number
EP 05 10 2888

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X,D	US 5 315 730 A (KIM ET AL) 31 May 1994 (1994-05-31) * the whole document *	1,3-5	INV. A46B5/00 A46B9/06
X,D	US 2 084 873 A (STRAUSE LOUIS J) 22 June 1937 (1937-06-22) * the whole document *	1,3-6	
X	EP 0 471 312 A (KAO CORPORATION) 19 February 1992 (1992-02-19) * the whole document *	1,3-6	
X	US 4 672 706 A (HILL ET AL) 16 June 1987 (1987-06-16) * the whole document *	1,4,5	
A	US 4 457 039 A (MASSARI ET AL) 3 July 1984 (1984-07-03) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A46B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		5 April 2006	Triantaphillou, P
CATEGORY OF CITED DOCUMENTS 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 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			

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EPO FORM 1503 03.02 (P04C01)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

☒ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-6



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6

Toothbrush with bristles at the end of an extension at one end of the handle which handle is arranged at an angle to the axis of the handle.

2. claims: 7,8

Toothbrush with bristles at both ends of the handle with a "nodule" at one extreme of the handle that keeps the brush spaced away from the horizontal surface when stored in an upright position.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 10 2888

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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05-04-2006

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82