



(11) **EP 1 661 485 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
11.07.2012 Bulletin 2012/28

(51) Int Cl.:
A46B 3/06 (2006.01) **A46B 3/08** (2006.01)
A46B 7/04 (2006.01) **A46D 1/00** (2006.01)

(43) Date of publication A2:
31.05.2006 Bulletin 2006/22

(21) Application number: **05024708.9**

(22) Date of filing: **11.11.2005**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(71) Applicant: **FIRMA G.B. BOUCHERIE, naamloze vennootschap 8870 Izegem (BE)**

(72) Inventor: **Boucherie, Bart Gerhard B-8870 Izegem (BE)**

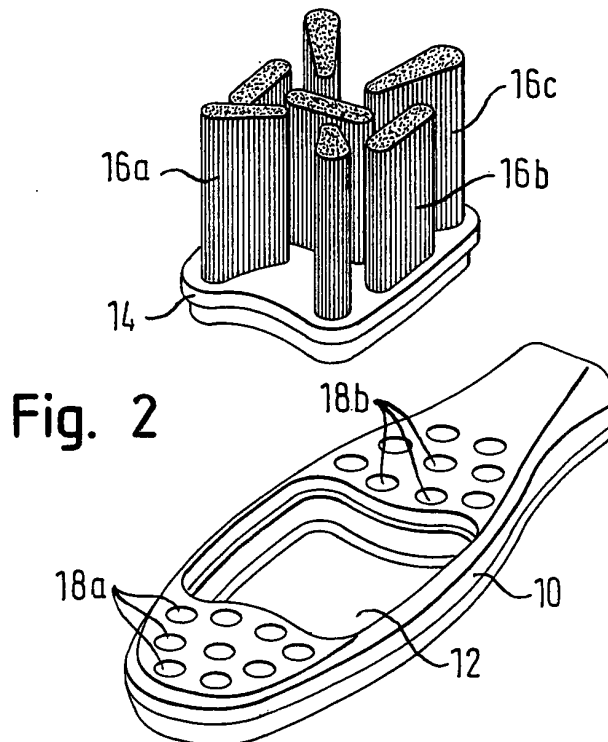
(30) Priority: **19.11.2004 DE 202004017997 U**
01.12.2004 DE 202004018612 U

(74) Representative: **Prinz & Partner Patentanwälte Rundfunkplatz 2 80335 München (DE)**

(54) **Toothbrush**

(57) A toothbrush comprises a brush body with a brush head and a carrier platelet attached to the brush head. A plurality of bristle bundles consisting of a thermoplastic material are attached anchor-less to the platelet. The brush head in addition has: bores, recesses or

holes which have bristle bundles inserted and affixed with anchors or loops; and/or bores, recesses or holes which have knobs, pegs, pointed bristles or pointed cones inserted therein; and/or knobs, pegs, pointed bristles or pointed cones attached to the brush head.



EP 1 661 485 A3



PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 05 02 4708

| 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 | WO 2004/093718 A1 (TRISA HOLDING AG [CH]; FISCHER FRANZ [CH]; GROSS PETER [CH]) 4 November 2004 (2004-11-04) | 1-6 | INV. A46B3/06 A46B3/08 A46B7/04 A46D1/00 | |
| Y | * page 12, lines 28-32; figures 5a-5c,6b,8,11e * | 7 | | |
| X | WO 03/086140 A1 (TRISA HOLDING AG [CH]; HUBER BEAT [CH]; FISCHER FRANZ [CH]) 23 October 2003 (2003-10-23) | 1-3,5,6 | | |
| Y | * page 7, lines 14-21; figures 2a,2c,3b,3c,4b,5b,6b,7b, * | 7 | | |
| X | US 2004/117934 A1 (PFENNIGER PHILIPP [CH] ET AL) 24 June 2004 (2004-06-24) | 1-3,5,6 | | |
| Y | * figures 5a,7a * | 7 | | |
| X | WO 2004/028293 A1 (COLGATE PALMOLIVE CO [US]) 8 April 2004 (2004-04-08) | 1-3,5,6 | | |
| Y | * figures 10,11,13-17 * | 7 | | |
| | | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | | A46B A46D |
| INCOMPLETE SEARCH | | | | |
| The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out. | | | | |
| Claims searched completely : | | | | |
| Claims searched incompletely : | | | | |
| Claims not searched : | | | | |
| Reason for the limitation of the search: see sheet C | | | | |
| Place of search | | Date of completion of the search | Examiner | |
| Munich | | 4 June 2012 | Salvatore, Claudio | |
| CATEGORY OF CITED DOCUMENTS | | 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 | | |
| 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 | | & : member of the same patent family, corresponding document | | |

2
EPO FORM 1503 03.82 (P04/E07)



**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 05 02 4708

Claim(s) completely searchable:
1-8

Claim(s) not searched:
9-11

Reason for the limitation of the search:

As a result of a communication under R.62a EPC, only independent claim 1 was searched, hence claims 9-11 were not searched.

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

EP 05 02 4708

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-06-2012

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|-------------------------|------------------|
| WO 2004093718 A1 | 04-11-2004 | AT 555744 T | 15-05-2012 |
| | | AU 2003218595 A1 | 19-11-2004 |
| | | AU 2009233680 A1 | 26-11-2009 |
| | | BR 0318268 A | 23-05-2006 |
| | | CA 2522103 A1 | 04-11-2004 |
| | | CN 1764422 A | 26-04-2006 |
| | | EP 1615586 A1 | 18-01-2006 |
| | | EP 2449918 A2 | 09-05-2012 |
| | | MX PA05011251 A | 14-12-2005 |
| | | US 2006096053 A1 | 11-05-2006 |
| | | US 2008148502 A1 | 26-06-2008 |
| | | US 2008238182 A1 | 02-10-2008 |
| | | WO 2004093718 A1 | 04-11-2004 |
| WO 03086140 A1 | 23-10-2003 | AT 383790 T | 15-02-2008 |
| | | AU 2003212184 A1 | 27-10-2003 |
| | | DE 10216641 A1 | 23-10-2003 |
| | | EP 1494561 A1 | 12-01-2005 |
| | | WO 03086140 A1 | 23-10-2003 |
| US 2004117934 A1 | 24-06-2004 | AU 2003293588 A1 | 14-07-2004 |
| | | AU 2011200832 A1 | 17-03-2011 |
| | | BR 0317399 A | 16-11-2005 |
| | | CA 2503778 A1 | 08-07-2004 |
| | | CN 1713838 A | 28-12-2005 |
| | | CN 101332012 A | 31-12-2008 |
| | | DE 10259723 A1 | 01-07-2004 |
| | | EP 1571945 A1 | 14-09-2005 |
| | | EP 2292118 A1 | 09-03-2011 |
| | | EP 2298126 A1 | 23-03-2011 |
| | | HK 1082393 A1 | 11-12-2009 |
| | | KR 20050084431 A | 26-08-2005 |
| | | MX PA05005332 A | 16-08-2005 |
| | | RU 2334445 C2 | 27-09-2008 |
| | | US 2004117934 A1 | 24-06-2004 |
| | | US 2006080795 A1 | 20-04-2006 |
| | | US 2007094824 A1 | 03-05-2007 |
| | | US 2009193604 A1 | 06-08-2009 |
| US 2011010881 A1 | 20-01-2011 | | |
| US 2011258797 A1 | 27-10-2011 | | |
| WO 2004056235 A1 | 08-07-2004 | | |
| WO 2004028293 A1 | 08-04-2004 | AU 2003279042 A1 | 19-04-2004 |
| | | BR 0314712 A | 26-07-2005 |
| | | CA 2499941 A1 | 08-04-2004 |
| | | EP 1555908 A1 | 27-07-2005 |

EPO FORM P0459

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

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

EP 05 02 4708

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-06-2012

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|-------------------------|------------------|
| | | KR 20050057599 A | 16-06-2005 |
| | | MX PA05003306 A | 05-07-2005 |
| | | WO 2004028293 A1 | 08-04-2004 |
| ----- | | | |

EPO FORM P0459

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