

Title (en)  
Toothbrush.

Title (de)  
Zahnbürste.

Title (fr)  
Brosse à dents.

Publication  
**EP 0596633 A1 19940511 (EN)**

Application  
**EP 93308469 A 19931025**

Priority  
JP 32136492 A 19921106

Abstract (en)  
A toothbrush (10) capable of permitting the tips of bristles (12) to enter or reach areas such as recesses between teeth, boundaries between teeth and gingivae, and the like to effectively remove dental plaque and the like and exhibit a soft feeling sufficient to prevent damage to gingivae. The toothbrush includes bristles (12) made of a synthetic filament material. The bristles are pointed at both tips (14) into a tapered shape and tied up into a plurality of bundles. The pointed tapered tips (14) of the bristles (12) are each formed with a length of 4 to 8mm and a non-tapered section (16) of each of the bristles is formed with a maximum diameter of 0.16 to 0.20mm. Bristle setting holes (22) of a bristle setting base or carrier (20) provided at distal end of a handle (18) of the toothbrush so as to set the bundles of bristles thereon are formed with a diameter of 1.5 to 2.0mm and spaced from other holes at an interval (X) of 1.0 to 1.2mm in the longitudinal direction of the handle (18). <IMAGE>

IPC 1-7  
**A46B 9/04; A46D 1/00**

IPC 8 full level  
**A46B 3/22** (2006.01); **A46B 9/04** (2006.01); **A46D 1/00** (2006.01)

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**A46B 9/04** (2013.01); **A46D 1/00** (2013.01); **A46D 1/0276** (2013.01); **A46B 2200/1066** (2013.01)

Citation (search report)  
• [A] DE 9012603 U1 19920109  
• [A] US 2511004 A 19500613 - PETERSON RUBEN O  
• [A] DE 1185574 B 19650121 - RHODIACETA

Cited by  
EP2449918A3; EP1425989A1; EP1871195A4; EP0716821A1; US6202241B1; US6044514A; US2018021116A1; US10687925B2; EP1962640A4; KR20190020117A; CN109843216A; CN115153935A; US8813299B2; EP1774924A1; US6543083B1; WO0103544A1; WO2012038501A1; WO0189345A3; WO2007016802A1; WO9742854A1; WO0226080A1; US9655435B2; EP1566116A3; US2014338140A1; US9788643B2; US2018000237A1; DE202006020598U1; US8239996B2; DE102011105083A1; WO2004093718A1; EP2886081A1; US9681933B2; EP3305245A1; US10610340B2; US11219513B2

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