

Abstract

A toothbrush filament preparation method, a prepared toothbrush filament, and
5 a toothbrush. The toothbrush filament preparation method comprises: melting and
extruding a piezoelectric polymer, and executing a corona polarization step and an
annealing step, such that the piezoelectric constant of a toothbrush filament in a
standing state is greater than or equal to 0.4 pC/N, and some polarization charges
10 stably exist on the surface of the toothbrush filament. The problem of bacteria
breeding on a toothbrush filament in a standing state can be effectively relieved by
utilizing the action principle of physical electrical stimulation for an antibacterial
purpose, thereby improving the antibacterial properties of the toothbrush filament.

[Fig. 1]

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