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Luebke

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(54) **DENTAL AND MEDICAL INSTRUMENTS
COMPRISING TITANIUM**

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patent is extended or adjusted under 35
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This patent is subject to a terminal dis-
claimer.

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- (52) **U.S. Cl.**
CPC **A61C 5/023** (2013.01)
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See application file for complete search history.

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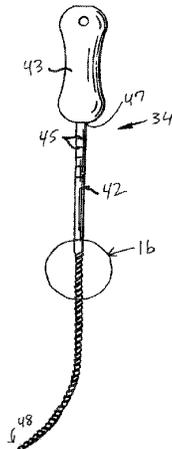
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(57) **ABSTRACT**

Endodontic instruments for use in performing root canal therapy on a tooth are disclosed. In one form, the instruments include an elongate shank having a cutting edge extending from a distal end of the shank along an axial length of the shank. The shank comprises a titanium alloy, and the shank is prepared by heat-treating the shank at a temperature above 25° C. in an atmosphere consisting essentially of a gas unreactive with the shank. In another form, the endodontic instruments have an elongate shank having a cutting edge extending from a distal end of the shank along an axial length of the shank. The shank consists essentially of a titanium alloy selected from alpha-titanium alloys, beta-titanium alloys, and alpha-beta-titanium alloys. The instruments solve the problems encountered when cleaning and enlarging a curved root canal.

16 Claims, 7 Drawing Sheets



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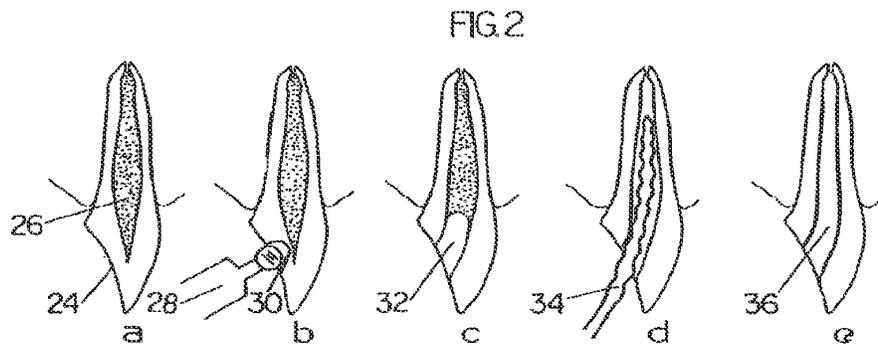
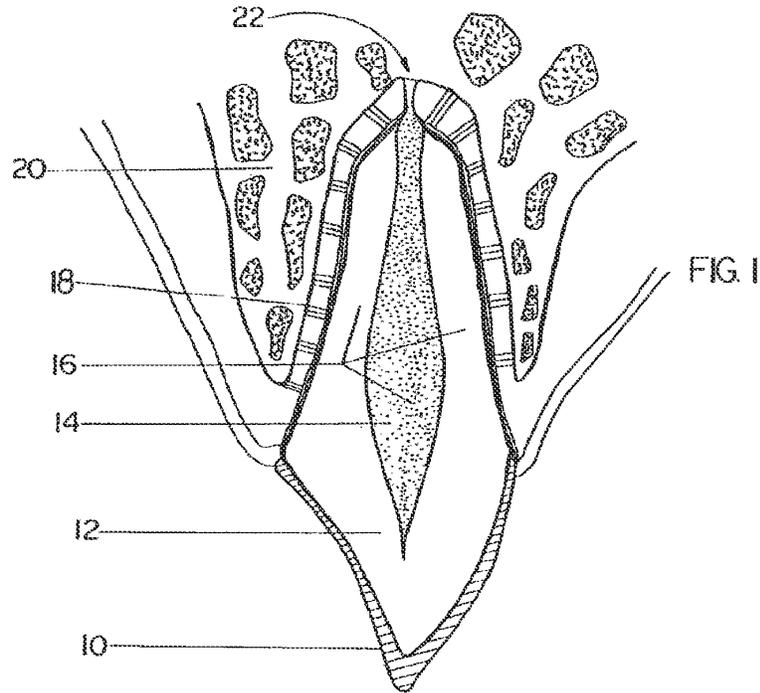
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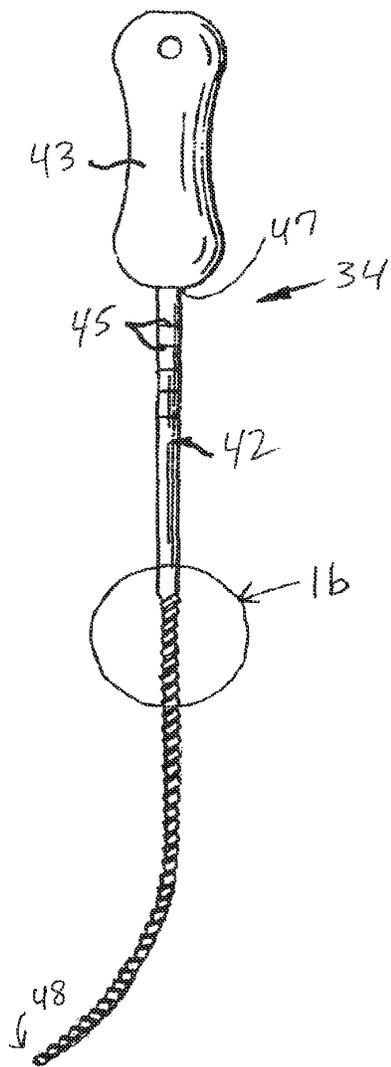


Fig. 1a

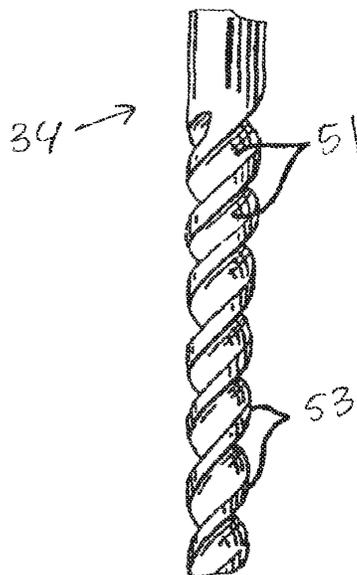
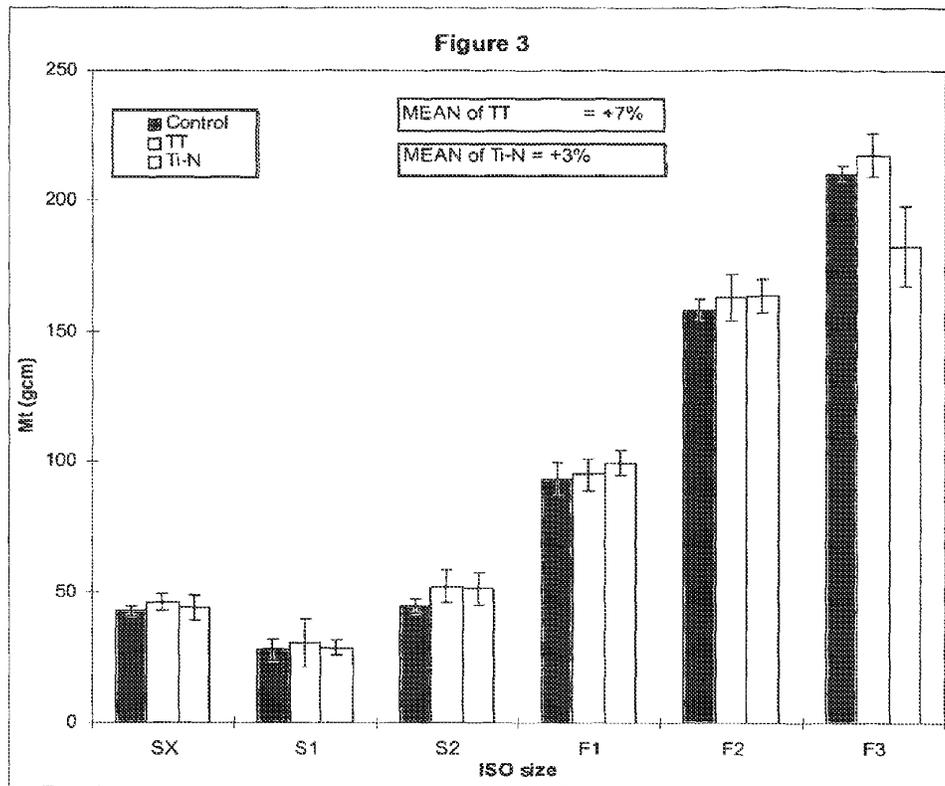


Fig. 1b



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